10/044,407

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NEWS 14 Nov 25 More calculated properties added to REGISTRY
NEWS 15 Dec 04 CSA files on STN
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NEWS 17 Dec 17 TOXCENTER enhanced with additional content
NEWS 18 Dec 17 Adis Clinical Trials Insight now available on STN
NEWS 19 Jan 29 Simultaneous left and right truncation added to COMPENDEX,
                ENERGY, INSPEC
NEWS 20 Feb 13 CANCERLIT is no longer being updated
NEWS 21 Feb 24 METADEX enhancements
NEWS 22 Feb 24 PCTGEN now available on STN
NEWS 23 Feb 24 TEMA now available on STN
NEWS 24 Feb 26 NTIS now allows simultaneous left and right truncation
NEWS 25 Feb 26 PCTFULL now contains images
NEWS 26 Mar 04 SDI PACKAGE for monthly delivery of multifile SDI results
NEWS 27 Mar 20 EVENTLINE will be removed from STN
NEWS 28 Mar 24 PATDPAFULL now available on STN
NEWS 29 Mar 24 Additional information for trade-named substances without
                structures available in REGISTRY
NEWS 30 Apr 11 Display formats in DGENE enhanced
NEWS 31 Apr 14 MEDLINE Reload
NEWS 32 Apr 17 Polymer searching in REGISTRY enhanced
NEWS 33 Apr 21 Indexing from 1947 to 1956 being added to records in CA/CAPLUS
NEWS 34 Apr 21 New current-awareness alert (SDI) frequency in
                 WPIDS/WPINDEX/WPIX
NEWS 35 Apr 28 RDISCLOSURE now available on STN
NEWS 36 May 05 Pharmacokinetic information and systematic chemical names
                 added to PHAR
NEWS 37 May 15 MEDLINE file segment of TOXCENTER reloaded
NEWS 38 May 15 Supporter information for ENCOMPPAT and ENCOMPLIT updated
NEWS 39 May 16 CHEMREACT will be removed from STN
NEWS 40 May 19 Simultaneous left and right truncation added to WSCA
NEWS 41 May 19 RAPRA enhanced with new search field, simultaneous left and
                right truncation
NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
              MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
              AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
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              Welcome Banner and News Items
NEWS LOGIN
              Direct Dial and Telecommunication Network Access to STN
NEWS PHONE
              CAS World Wide Web Site (general information)
NEWS WWW
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FILE 'HOME' ENTERED AT 21:51:58 ON 31 MAY 2003

=> s foam and binder and stabilzer and water
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Some commands only work in certain files. For example, the EXPAND
command can only be used to look at the index in a file which has an
index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of
commands which can be used in this file.

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE
ENTRY
SESSION

FULL ESTIMATED COST

5 0.63

0.63

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FILE COVERS 1907 - 31 May 2003 VOL 138 ISS 23 FILE LAST UPDATED: 30 May 2003 (20030530/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s foam and binder and stabilzer and water
87093 FOAM
48183 FOAMS
95884 FOAM
(FOAM OR FOAMS)
152239 BINDER
72868 BINDERS
177763 BINDER
(BINDER OR BINDERS)
2 STABILZER
2025901 WATER
224221 WATERS

2076538 WATER

```
(WATER OR WATERS)
            O FOAM AND BINDER AND STABILZER AND WATER
L1
=> s foam and binder and stabilizer and water
        87093 FOAM
        48183 FOAMS
        95884 FOAM
                (FOAM OR FOAMS)
       152239 BINDER
        72868 BINDERS
       177763 BINDER
                (BINDER OR BINDERS)
        72431 STABILIZER
         62172 STABILIZERS
        98561 STABILIZER
                (STABILIZER OR STABILIZERS)
      2025901 WATER
       224221 WATERS
      2076538 WATER
                (WATER OR WATERS)
           35 FOAM AND BINDER AND STABILIZER AND WATER
L2
=> d 12 1-35 all
    ANSWER 1 OF 35 CAPLUS COPYRIGHT 2003 ACS
L<sub>2</sub>
Full Text
AN 2003:247655 CAPLUS
DN
   138:308041
TI Foaming thermal insulating material and coating based on rubber granules
    with urethane binder and water foaming initiator for walls of dwellings
    Louw Van Wyk, Stanley; Matthews, Edward Henry
PA University of Pretoria, S. Afr.
SO S. African, 23 pp.
    CODEN: SFXXAB
   Patent
DT
LA English
IC ICM E04B
     ICS C04B
     58-4 (Cement, Concrete, and Related Building Materials)
     Section cross-reference(s): 38, 39, 60
FAN.CNT 1
     PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
     ______
                                         _____
                   A
     ZA 9903725
                                         ZA 1999-3725
                                                         19990601
                           19991202
PRAI ZA 1999-3725
                           19990601
    A method of making an insulating material, the method including the step
     of forming a compn. by combining a rubber component with a binding agent
     and an initiator, the binding agent and the initiator being selected so
     that reaction of the binding agent with the initiator liberates gas
     bubbles which cause foaming of the compn. Thus, an insulating compn. was
     prepd. by combining Rubber Grade 30 (7.41 kg), Durethane D103 (0.74 kg),
     Aparyl B (1.48 kg), TCPP (1.48 kg), PVA paint (0.41 L) and Tinuvin B75
     (0.012 L). The batches of the resulting mixt. (5 kg) mixed for 10 min
     produced a relatively thick liq. The liq. was then painted onto the outer
     walls of a corrugated iron shack. The structure of the shack was
     essentially that of a wooden frame with corrugated iron cladding. The
     insulating material was applied to the outer surfaces of the shack in a
     layer about 15 mm thick. Gaps between the wall and roof, wall and floor
```

and wall and door were sealed with foam rubber. The overall thermal conductance for an uninsulated shack was found to be 4.13 W/m2K and for the insulated shack 3.02 W/m2K. These values included heat filtration and other transfer mechanisms and do not represent the thermal cond. of the

```
insulating material alone. The results imply that for every degree C the
     shack is warmed above ambient temp., the (inside surface area) \times 1.11 W is
     saved in energy for the insulated shack.
    thermal insulating rubber based foaming material dwelling; scrap tire
ST
    rubber recycling thermal insulating foaming material dwelling; urethane
    binder scrap tire rubber thermal insulating coating
TТ
    Alkanes, processes
    RL: CPS (Chemical process); PEP (Physical, engineering or chemical
    process); TEM (Technical or engineered material use); PROC (Process); USES
        (C5-6; foaming thermal insulating material/coating based on rubber
        granules with urethane binder and water foaming
        initiator for walls of dwellings)
     Polyurethanes, processes
     RL: CPS (Chemical process); PEP (Physical, engineering or chemical
     process); TEM (Technical or engineered material use); PROC (Process); USES
     (Uses)
        (adhesive binders; foaming thermal insulating
        material/coating based on rubber granules with urethane binder
        and water foaming initiator for walls of dwellings)
     Waste plastics and rubbers
TT
        (crumb rubber; foaming thermal insulating material/coating based on
        rubber granules with urethane binder and water
        foaming initiator for walls of dwellings)
IT
    Coating materials
        (foamed; foaming thermal insulating material/coating based on rubber
        granules with urethane binder and water foaming
        initiator for walls of dwellings)
     Adhesion, physical
     Coloring materials
     Fireproofing agents
     Foaming
     Recycling of plastics and rubbers
     Scrap tires
     Thermal conductivity
        (foaming thermal insulating material/coating based on rubber granules
        with urethane binder and water foaming initiator
        for walls of dwellings)
     Foaming agents
TΤ
        (initiators; foaming thermal insulating material/coating based on
        rubber granules with urethane binder and water
        foaming initiator for walls of dwellings)
     Walls (construction)
        (insulated; foaming thermal insulating material/coating based on rubber
        granules with urethane binder and water foaming
        initiator for walls of dwellings)
TΤ
     Buildings
        (residential, insulated; foaming thermal insulating material/coating
        based on rubber granules with urethane binder and
        water foaming initiator for walls of dwellings)
     Thermal insulators
TΤ
        (rubber-urethane binder based; foaming thermal insulating
        material/coating based on rubber granules with urethane binder
        and water foaming initiator for walls of dwellings)
     Rubber, preparation
     Urethane rubber, preparation
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
     engineered material use); PREP (Preparation); USES (Uses)
        (thermal insulating foamed material; foaming thermal insulating
        material/coating based on rubber granules with urethane binder
        and water foaming initiator for walls of dwellings)
```

Binders

IΤ

```
(urethane; foaming thermal insulating material/coating based on rubber
        granules with urethane binder and water foaming
        initiator for walls of dwellings)
IT
    Paints
        (water-thinned; foaming thermal insulating material/coating
       based on rubber granules with urethane binder and
       water foaming initiator for walls of dwellings)
    194739-11-2, Tinuvin B75
TΤ
    RL: MOA (Modifier or additive use); USES (Uses)
        (UV-stabilizer; foaming thermal insulating material/coating
       based on rubber granules with urethane binder and
        water foaming initiator for walls of dwellings)
TΨ
     65216-05-9, Desmodur E 22 508169-74-2, Durethane D 103
     RL: CPS (Chemical process); PEP (Physical, engineering or chemical
    process); TEM (Technical or engineered material use); PROC (Process); USES
     (Uses)
        (binder; foaming thermal insulating material/coating based on
        rubber granules with urethane binder and water
        foaming initiator for walls of dwellings)
    507478-50-4, Aparyl B 507479-53-0, Micon
ΤT
    RL: MOA (Modifier or additive use); USES (Uses)
        (flame retardant; foaming thermal insulating material/coating based on
        rubber granules with urethane binder and water
        foaming initiator for walls of dwellings)
    7732-18-5, Water, processes
IT
     RL: CPS (Chemical process); PEP (Physical, engineering or chemical
    process); PROC (Process)
        (foaming initiator; foaming thermal insulating material/coating based
        on rubber granules with urethane binder and water
        foaming initiator for walls of dwellings)
IT
    9002-89-5, Polyvinyl alcohol
     RL: MOA (Modifier or additive use); USES (Uses)
        (paint, coloring agent; foaming thermal insulating material/coating
       based on rubber granules with urethane binder and
       water foaming initiator for walls of dwellings)
    79-01-6, Trichloroethylene, processes 108-10-1, Methyl isobutyl ketone
ΙT
     123-86-4, n-Butyl acetate
    RL: CPS (Chemical process); PEP (Physical, engineering or chemical
    process); TEM (Technical or engineered material use); PROC (Process); USES
     (Uses)
        (solvent; foaming thermal insulating material/coating based on rubber
        granules with urethane binder and water foaming
        initiator for walls of dwellings)
   ANSWER 2 OF 35 CAPLUS COPYRIGHT 2003 ACS
1.2
Full Text
AN
   2003:82782 CAPLUS
DN 138:157724
TI Raw mixture for foamed concrete with improved thermal-insulating
    properties
IN
    Solomatov, V. I.; Cherkasov, V. D.; Buzulukov, V. I.; Kiselev, E. V.;
    Merkushkin, A. I.
    Mordovskii Gosudarstvennyi Universitet im. N. P. Ogareva, Russia
PΑ
    Russ., No pp. given
    CODEN: RUXXE7
DT Patent
LA Russian
IC ICM C04B038-10
CC 58-2 (Cement, Concrete, and Related Building Materials)
FAN.CNT 1
    PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
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C2 20020910
PI RU 2188808
                                         RU 2000-121302 20000808
PRAI RU 2000-121302
                           20000808
AB The mix comprises cement 30-35, ground fine limestone powder 20-24,
     protein hydrolyzate of microorganism synthesis as a foaming agent
     0.1-0.16, metal sulfate as foam stabilizer 0.0039-0.0062, and water
     in the balance. The foam stabilizer is selected from Cu(SO4),
     Fe(SO4), and Al2(SO4)3. The invention is suitable in the manuf. of
     structural cellular concrete articles based on cement. The resulting mix
     provides decreased d. and heat cond. of foamed concrete without
     deterioration of strength properties.
ST
   cellular concrete cement limestone protein hydrolyzate thermal insulator
IT Limestone, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (aggregate, fine powder; raw mixt. for foam concrete with
        improved thermal-insulating properties)
TΤ
    Cement
        (binder; raw mixt. for foam concrete with improved
        thermal-insulating properties)
   Compressive strength
TΥ
     Thermal conductivity
     Thermal insulators
        (cellular concrete; raw mixt. for foam concrete with improved
       thermal-insulating properties)
IT
   Concrete
        (cellular; raw mixt. for foam concrete with improved
       thermal-insulating properties)
   Protein hydrolyzates
IT
     RL: MOA (Modifier or additive use); USES (Uses)
       (foaming agent; raw mixt. for foam concrete with improved
       thermal-insulating properties)
IT 7720-78-7, Iron sulfate (FeSO4)
                                     10043-01-3, Aluminum sulfate (Al2(SO4)3)
     12772-98-4, Sulfur oxide (SO4)
     RL: MOA (Modifier or additive use); USES (Uses)
        (foam stabilizer; raw mixt. for foam
        concrete with improved thermal-insulating properties)
L2 ANSWER 3 OF 35 CAPLUS COPYRIGHT 2003 ACS
Full Text
   2003:71799 CAPLUS
   138:123981
TI Water-thinned crosslinkable coating compositions with low moisture
    permeability and good storage stability
IN
   Fischer, Gordon Charles; Fioravanti, Louis Carl, Jr.; Frazza, Mark Stephen
PA
   Rohm and Haas Company, USA
   U.S., 8 pp.
    CODEN: USXXAM
DT
   Patent
LA English
   ICM C08L033-14
IC
NCL 524558000; 427361000; 427368000; 427371000; 427385500; 427388200;
    427388300; 427389900; 427391000; 427393000
   42-7 (Coatings, Inks, and Related Products)
    Section cross-reference(s): 38
FAN.CNT 1
                    KIND DATE
    PATENT NO.
                                        APPLICATION NO. DATE
    _____
                                         _____
   US 6512042
                    B1 20030128
                                         US 1996-769023 19961218
PRAI US 1996-769023
                          19961218
    The compn., useful as binders in coatings or adhesives, particularly in
    one-pack storage-stable coating compns., comprises (a) an aq. dispersion
    of an acrylic polymer component contq. a carbonyl functional group and
    having Hansch value ≥1.5; (b) a nitrogen-contg. compd. having
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≥2 carbonyl-reactive nitrogen groups; and (c) optionally,
    cosolvents, pigments, fillers, dispersants, wetting agents, anti-foam
    agents, UV absorbers, antioxidants, biocides, and stabilizers. Thus, 50
    g copolymer prepd. by emulsion polymn. of Bu acrylate 35.7, styrene 14.2,
    Me methacrylate 28.5, acetoacetoxyethyl methacrylate (I) 15,
    2-hydroxyethyl methacrylate 4.6, allyl methacrylate 0.5, and itaconic acid
     1.5 parts was mixed with aminoethyl piperazine 1 mol equiv. (based on I)
     and heated at 60° for 10 days, showing no gel.
    acrylic coating one pack storage stability; carbonyl acrylic polymer
ST
     coating water thinned; nitrogen crosslinker carbonyl acrylic polymer
     coating; moisture permeability water thinned acrylic coating
IT
    Polyamides, uses
    RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
     (Technical or engineered material use); PREP (Preparation); USES (Uses)
        (acrylic; water-thinned crosslinkable carbonyl-contg. acrylic
        coating compns. with low moisture permeability and good storage
       stability)
IT
    Cement
        (fiber, substrates; water-thinned crosslinkable
        carbonyl-contg. acrylic coating compns. with low moisture permeability
        and good storage stability)
     Coating materials
        (one-component; water-thinned crosslinkable carbonyl-contg.
        acrylic coating compns. with low moisture permeability and good storage
        stability)
IT
     Polyoxyalkylenes, uses
    RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
     (Technical or engineered material use); PREP (Preparation); USES (Uses)
        (polyamine-, reaction products with carbonyl-contg. acrylic polymers;
       water-thinned crosslinkable carbonyl-contg. acrylic coating
       compns. with low moisture permeability and good storage stability)
ΙT
    Polyamines
    RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
     (Technical or engineered material use); PREP (Preparation); USES (Uses)
        (polyoxyalkylene-, reaction products with carbonyl-contg. acrylic
        polymers; water-thinned crosslinkable carbonyl-contg. acrylic
        coating compns. with low moisture permeability and good storage
        stability)
    Coating materials
TΤ
        (room-temp.-curable; water-thinned crosslinkable
        carbonyl-contg. acrylic coating compns. with low moisture permeability
        and good storage stability)
TΤ
    Coating materials
        (storage-stable; water-thinned crosslinkable carbonyl-contg.
        acrylic coating compns. with low moisture permeability and good storage
        stability)
ΙT
    Concrete
    Paper
     Paperboard
     Wood
        (substrates; water-thinned crosslinkable carbonyl-contg.
        acrylic coating compns. with low moisture permeability and good storage
        stability)
    Asphalt
    Clays, miscellaneous
    Marble
    Metals, miscellaneous
     Plastics, miscellaneous
     Stone (construction material)
     RL: MSC (Miscellaneous)
        (substrates; water-thinned crosslinkable carbonyl-contg.
        acrylic coating compns. with low moisture permeability and good storage
```

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stability)
ΙT
    Paints
        (water-thinned crosslinkable carbonyl-contg. acrylic coating
        compns. with low moisture permeability and good storage stability)
     Coating materials
TT
        (water-thinned; water-thinned crosslinkable
        carbonyl-contg. acrylic coating compns. with low moisture permeability
        and good storage stability)
     488808-32-8P, Acetoacetoxyethyl methacrylate-allyl methacrylate-butyl
     acrylate-2-hydroxyethyl acrylate-styrene 4copolymer 488808-33-9P
     RL: IMF (Industrial manufacture); POF (Polymer in formulation); PREP
     (Preparation); USES (Uses)
        (water-thinned crosslinkable carbonyl-contg. acrylic coating
        compns. with low moisture permeability and good storage stability)
     192126-79-7P 192126-81-1P 192126-84-4P 192126-86-6P
                                                              192126-88-8P
ΙT
                  192126-92-4P 192126-94-6P 192126-95-7P
                                                                192126-96-8P
     192126-90-2P
                                 192127-01-8P 192127-02-9P
     192126-98-0P 192126-99-1P
                                                                192127-03-0P
    192127-04-1P 192127-05-2P 192127-06-3P 192127-07-4P,
     2-Acetoacetoxyethyl methacrylate-allyl methacrylate-1,5-diamino-2-
    methylpentane-ethylhexyl acrylate-2-hydroxyethyl methacrylate-itaconic
    acid-methyl methacrylate copolymer 192127-08-5P, 2-Acetoacetoxyethyl
     methacrylate-butyl acrylate-1,2-diaminocyclohexane-2-hydroxyethyl
    methacrylate-styrene copolymer 192127-09-6DP, reaction products with
    polyoxyalkylene polyamines 192127-10-9P 192133-72-5P 192133-73-6P
    192133-74-7P 488808-34-0P 488808-35-1P 488808-36-2P
                                                                488808-37-3P
    488808-38-4P 488808-39-5P 488808-40-8P 488808-41-9P,
     Acetoacetoxyethyl methacrylate-allyl methacrylate-1,2-diaminocyclohexane-2-
     ethylhexyl acrylate-2-hydroxyethyl methacrylate-methacrylic acid-styrene
     copolymer
     RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
     (Technical or engineered material use); PREP (Preparation); USES (Uses)
        (water-thinned crosslinkable carbonyl-contg. acrylic coating
        compns. with low moisture permeability and good storage stability)
             THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 13
RE
(1) Anon; EP 96308423
(2) Anon; EP 0264983 A 1988 CAPLUS
(3) Anon; JP 43-72674 1992
(4) Anon; EP 0555774 A1 1993 CAPLUS
(5) Anon; WO 9316133 1993 CAPLUS
(6) Anon; WO 9421738 1994 CAPLUS
(7) Anon; JP 07-102218 1995
(8) Anon; WO 9509209 1995 CAPLUS
(9) Anon; Chemical Reviews 1993, V93(4), P1281
(10) Bors; US 5484849 A 1996 CAPLUS
(11) Esser; US 5498659 A 1996 CAPLUS
(12) Knutson; US 5055506 A 1991 CAPLUS
(13) Lavoie; US 5525662 A 1996 CAPLUS
L2
    ANSWER 4 OF 35 CAPLUS COPYRIGHT 2003 ACS
Full Text
     2000:355608 CAPLUS
AN
DN
    132:323340
    Solid slow-releasing detergent and its preparation
ΤI
IN Liu, Wenging
    Peop. Rep. China
PA
    Faming Zhuanli Shenqing Gongkai Shuomingshu, 5 pp.
SO
    CODEN: CNXXEV
DT
   Patent
LA
   Chinese
   ICM C11D001-83
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ICS C11D011-00

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CC 46-6 (Surface Active Agents and Detergents)
FAN.CNT 1
                                          APPLICATION NO. DATE
    PATENT NO.
                     KIND DATE
     _____ ____
                                          CN 1997-114247 19970915
    CN 1219577
                           19990616
                      Α
    CN 1069107
                      В
                           20010801
                          19970804
PRAI CN 1997-114204
                      Α
    The title detergent contains 12-50% surfactants (e.g., anionic and/or
    nonionic, such as alkyl benzenesulfonate, fatty alc. sulfate), 6-15%
    polymer binder (e.g., epoxy resins, polyamides), foam controlling
    agent (silicone oil), foam synergistic agent (fatty acid monoethylene
    glycol ester), detergency promoter (Na2CO3, water glass, Na
    aluminosilicate, EDTA-disodium salt, and Na tripolyphosphate), anti-pptg.
    agent (CMC), anticorrosive agent (Na2SiO3), whitening agent, enzyme
     (proteinase and/or amylase), dilg. agent, and water.
    solid detergent slow releasing prepn; anionic nonionic surfactant slow
ST
    releasing detergent; whitening agent enzyme slow releasing detergent
IT
    Polyoxyalkylenes, uses
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
        (alkyl ether, surfactants; solid slow-releasing detergent and prepn.)
    Fatty acids, uses
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
        (esters, surfactants; solid slow-releasing detergent and prepn.)
    Fatty acids, uses
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
        (ethoxides, foam synergistic agents; solid slow-releasing
        detergent and prepn.)
    Esters, uses
IT
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
        (fatty, surfactants; solid slow-releasing detergent and prepn.)
    Polysiloxanes, uses
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
        (foam stabilizers; solid slow-releasing detergent
       and prepn.)
TT
    Detergents
    Whitening agents
        (solid slow-releasing detergent and prepn.)
TΤ
    Epoxy resins, uses
    Polyamides, uses
    RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or
    engineered material use); USES (Uses)
        (solid slow-releasing detergent and prepn.)
    Enzymes, uses
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
        (solid slow-releasing detergent and prepn.)
    9004-32-4, Carboxymethyl cellulose
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
        (anti-pptg. agents; solid slow-releasing detergent and prepn.)
    6834-92-0, Sodium metasilicate
IT
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
        (anticorrosive agents; solid slow-releasing detergent and prepn.)
    139-33-3 497-19-8, Sodium carbonate, uses 1344-00-9, Sodium
    aluminosilicate 1344-09-8, Water glass 7758-29-4, Sodium
```

tripolyphosphate

```
RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
       (detergent promoters; solid slow-releasing detergent and prepn.)
TΤ
    7757-82-6, Sodium sulfate, uses
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
        (dilg. agents; solid slow-releasing detergent and prepn.)
    9000-92-4, Amylase 9001-92-7, Proteinase
TΤ
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
       (solid slow-releasing detergent and prepn.)
    25322-68-3D, Polyethylene glycol, alkyl ether
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
        (surfactants; solid slow-releasing detergent and prepn.)
L2 ANSWER 5 OF 35 CAPLUS COPYRIGHT 2003 ACS
Full Text
AN 1998:700927 CAPLUS
    129:319800
    Method for manufacturing foamed, lightweight ceramic products ·
TN
    Tseng, Chao-ming
    Taiwan
    U.S., 7 pp., Cont.-in-part of U.S. Ser. No. 574,365, abandoned.
    CODEN: USXXAM
DT
    Patent
    English
LA
    ICM C04B038-00
    ICS C04B038-08
NCL 264043000
CC 57-2 (Ceramics)
FAN.CNT 1
                                        APPLICATION NO. DATE
                     KIND DATE
    PATENT NO.
     _____
                                         _____
                                         US 1997-940017 19970929
                          19981027
    US 5827457
                     Α
PRAI US 1995-574365
                          19951218
    Using ≥1 expandable volcanic materials, ≥1 alk. earth
     oxides, hydroxides, or carbonates, ≥1 inorg. binders, and a
     foam stabilizer, the method comprises sintering and expanding a mixt.
     of the components, mixing and grinding the sintered material with water,
     drying the material, crushing the dried material, molding the resulting
     powder into desired forms, and sintering the powder forms. Preferably,
     the ceramic material is manufd. in a tunnel-type kiln using serially
     connected carts fed with the fine powder by controlled vibrational feeding
     means. The resulting foamed ceramics have excellent insulating properties
     because of their closed cellular structure, and are suitable for use as
     structural materials. A mixt. consisting of expanded perlite powder 43,
     MqCO3 20, aq. silicate 150, and talc 10 g was sintered for expansion, the
     expanded mixt. was added to 50 g water, and evenly ground to particle
     size <100 mesh, and dried at ~200°. The dried mixt. was
     crushed and ground into fine powder, molded, heated at 750° for one
     hour, cooled to obtain a white lightwt. ceramic material having d. 0.12
     q/cm3.
    foam lightwt ceramic product; expanded volcanic mineral foam ceramic;
     alk earth oxide hydroxide carbonate ceramic; inorg binder foam
     stabilizer ceramic; perlite expanded lightwt ceramic; magnesium
     carbonate foam lightwt ceramic; alkali metal silicate binder; talc
     foam stabilizer ceramic
   Obsidian
     Pitchstone
    RL: TEM (Technical or engineered material use); USES (Uses)
```

(expandable volcanic rock; foamed, lightweight ceramic products manuf.

from compns. contg. alk. earth oxide, hydroxide, or carbonate and inorg. binder and foam stabilizer and) Perlite TT Volcanic rocks RL: TEM (Technical or engineered material use); USES (Uses) (expanded; foamed, lightweight ceramic products manuf. from compns. contq. alk. earth oxide, hydroxide, or carbonate and inorg. binder and foam stabilizer and) IT Mica-group minerals, uses Silica gel, uses RL: MOA (Modifier or additive use); USES (Uses) (foam stabilizer; foamed, lightweight ceramic products manuf. from compns. contq. alk. earth oxide, hydroxide, or carbonate and expanded volcanic rock and inorg. binder and) Zeolites (synthetic), uses RL: MOA (Modifier or additive use); USES (Uses) (foam stabilizers; foamed, lightweight ceramic products manuf. from compns. contg. alk. earth oxide, hydroxide, or carbonate and expanded volcanic rock and inorg. binder and) Alkaline earth hydroxides Alkaline earth oxides RL: TEM (Technical or engineered material use); USES (Uses) (foamed, lightweight ceramic products manuf. from compns. contg. expanded volcanic rock and inorg. binder and foam stabilizer and) IT Ceramics (foamed, lightwt.; compns. contg. expandable volcanic mineral, alk. earth oxide, hydroxide, or carbonate, and inorg. binder and foam stabilizer for manuf. of) IT Stabilizing agents (for foam; foamed, lightweight ceramic products manuf. from compns. contg. alk. earth oxide, hydroxide, or carbonate and expanded volcanic rock and inorg. binder and) TΤ Binders (inorg.; foamed, lightweight ceramic products manuf. from compns. contg. alk. earth oxide, hydroxide, or carbonate and expanded volcanic rock and foam stabilizer and) ΤТ Furnaces (tunnel furnaces; compns. contg. alk. earth oxide, hydroxide, or carbonate and expanded volcanic rock and inorg. binder and foam stabilizer for foamed, lightweight ceramic products manuf. in) 1312-76-1, Potassium silicate 1344-09-8, Sodium silicate TТ RL: TEM (Technical or engineered material use); USES (Uses) (binder; foamed, lightweight ceramic products manuf. from compns. contq. alk. earth oxide, hydroxide, or carbonate and expanded volcanic rock and foam stabilizer and) 14807-96-6, Talc, uses RL: MOA (Modifier or additive use); USES (Uses) (foam stabilizer; foamed, lightweight ceramic products manuf. from compns. contg. alk. earth oxide, hydroxide, or carbonate and expanded volcanic rock and inorg. binder and) 471-34-1, Calcium carbonate, uses 546-93-0, Magnesium carbonate 1305-62-0, Calcium hydroxide, uses 1305-78-8, Calcia, uses 1309-42-8, Magnesium hydroxide 1309-48-4, Magnesia, uses 10101-39-0 RL: TEM (Technical or engineered material use); USES (Uses) (foamed, lightweight ceramic products manuf. from compns. contg. expanded volcanic rock and inorg. binder and foam stabilizer and) THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 14 RE (1) Anon; JP 2057302 1990

(2) Bowen; US 2583292 1952 CAPLUS(3) Erksine; US 4248810 1981 CAPLUS

(4) Gajardo; US 3203813 1965 CAPLUS (5) Keller; US 4740486 1988 CAPLUS (6) Keller; US 4780433 1988 CAPLUS (7) Kohl; US 3274310 1966 CAPLUS (8) Lundsager; US 4900698 1990 CAPLUS (9) Nagai; US 4822541 1989 (10) Noda; US 3958582 1976 CAPLUS (11) Shepard; US 5256222 1993 CAPLUS (12) Tange; US 5082607 1992 CAPLUS (13) Vogel; US 4336068 1982 CAPLUS (14) Wood; US 3833386 1974 CAPLUS L2 ANSWER 6 OF 35 CAPLUS COPYRIGHT 2003 ACS Full Text AN 1998:650592 CAPLUS DN 129:334605 TI Acoustic panels with nitrogen oxides adsorption function in air treatment and their manufacture IN Matsumoto, Tadashi; Hayashi, Yosuke; Tokunaga, Kenji PA Mitsubishi Materials Corp., Japan SO Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKXXAF Patent DT LA Japanese ICM E04B001-86 ICS B01D053-56; B01D053-81; G10K011-162; G10K011-16 58-2 (Cement, Concrete, and Related Building Materials) Section cross-reference(s): 59 FAN.CNT 1 APPLICATION NO. DATE PATENT NO. KIND DATE \_\_\_\_\_ \_\_\_\_\_ JP 1997-73252 19970326 JP 10266387 A2 19981006 PΤ PRAI JP 1997-73252 19970326 The title acoustic panels for sound insulation are manufd. by extruding an aerated slurry contg. cement, inorg. fibers, silicates, foaming agents, foam stabilizers, anatase-type titania powder (av. size 10-100 nm), and a binder to form molded panels, and then calcining at 150-200° for 2-10 h to form autoclaved lightwt. concrete (ALC) panels. The flat ALC panels can be successively painted with water-permeable paints and another kinds of paints showing improved cracking resistance and compressive strength. acoustic panel nitrogen oxide adsorption air; autoclaved lightwt concrete ST acoustic panel IT Sound insulators (acoustic panels with nitrogen oxides adsorption function in air treatment and their manuf.) Glass fibers, processes RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (acoustic panels with nitrogen oxides adsorption function in air treatment and their manuf.) Construction materials (autoclaved lightwt. panels with nitrogen oxides adsorption function in air treatment and their manuf.) Concrete ΤT (autoclaved, lightwt.; acoustic panels with nitrogen oxides adsorption function in air treatment and their manuf.) 9004-32-4 9004-57-3, Ethylcellulose RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(acoustic panels with nitrogen oxides adsorption function in air treatment and their manuf.)

IT 11104-93-1, Nitrogen oxide, processes

RL: POL (Pollutant); REM (Removal or disposal); OCCU (Occurrence); PROC (Process)

(acoustic panels with nitrogen oxides adsorption function in air treatment and their manuf.)

IT 9002-89-5, Poly(vinyl alcohol) 9004-67-5, Methylcellulose
RL: PEP (Physical, engineering or chemical process); TEM (Technical or
engineered material use); PROC (Process); USES (Uses)

(binder; acoustic panels with nitrogen oxides adsorption function in air treatment and their manuf.)

IT 13463-67-7, Titania, processes

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(powder; acoustic panels with nitrogen oxides adsorption function in air treatment and their manuf.)

L2 ANSWER 7 OF 35 CAPLUS COPYRIGHT 2003 ACS

#### Full Text

AN 1997:765494 CAPLUS

DN 128:35792

- TI Manufacture of thermally insulating housings for refrigerators and freezers
- IN Ueno, Kiyoshi; Hashita, Takashi; Suzuki, Masaaki
- PA Matsushita Electric Industrial Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 6 pp. CODEN: JKXXAF

CODEN:

DT Patent

LA Japanese

IC ICM F25D023-08

ICS B29C039-10; C08G018-00; C08J009-02; C08J009-14; C08L075-04; B29L031-00

CC 38-3 (Plastics Fabrication and Uses)

FAN.CNT 1

PAN.CNI I				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09310966	A2	19971202	JP 1996-124670	19960520
PRAI JP 1996-124670		19960520		

- The process involves (1) filling polyurethane raw materials contg.

  epoxides, CO2-stabilized catalysts, and blowing agents in gaps of outer
  and inner boxes, the inner face of one of or both boxes being laminated
  with closed cell layers, and blowing to give urethane foams having
  CO2-contg. closed cells and (2) reacting CO2 and the epoxides to reduce
  inner pressure of the cells. The urethane foams may contain carbonates
  which are the reaction products of epoxides and CO2. Thus, 100 parts
  hollow particles obtained from 10 parts cyclopentane (I) and 100 parts
  poly(vinylidene chloride) was dispersed in 100 parts ethylene-vinyl alc.
  copolymer to give a cellular sheet, which was laminated onto inner faces
  of an Al outer box and an ABS resin inner box. A blend of 130 parts a
  mixt. of polyol 100, foam stabilizer 3, I 11, H2O 1, amine catalyst 1,
  1,2-butylene oxide 8, ZnO 0.3, and Bu4N+ Br- 5.7 parts and 132.4 parts an
  isocyanate was fed in the gap of above boxes, reacted at 45°,
  blown, and cured to give a product.
- polyurethane foam thermal insulator housing refrigerator; epoxide carbon dioxide carbonate prepn polyurethane; water blowing agent polyurethane foam manuf; polyvinylidene chloride hollow particle sheet; catalyst carbon dioxide stabilization polyurethane manuf; ethylene vinyl alc copolymer foam housing; butylene oxide reaction carbonate prepn polyurethane
- IT Blowing agents

(CO2, captured by epoxides; manuf. of thermally insulating housings

with H2O-blown polyurethane foams and closed cell layers for

```
refrigerators)
     Catalysts
IT
        (carbon dioxide stabilization; manuf. of thermally insulating housings
        with H2O-blown polyurethane foams and closed cell layers for
        refrigerators)
    Thermal insulators
        (manuf. of thermally insulating housings with H2O-blown polyurethane
        foams and closed cell layers for refrigerators)
IT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction with CO2; manuf. of thermally insulating housings with
        H2O-blown polyurethane foams and closed cell layers for
        refrigerators)
     Polyurethanes, uses
ΙT
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
     engineered material use); PREP (Preparation); USES (Uses)
        (urea link-contg., contg. carbonates by reaction of CO2 and epoxides;
        manuf. of thermally insulating housings with H2O-blown polyurethane
        foams and closed cell layers for refrigerators)
    1314-13-2, Zinc oxide, uses 1643-19-2, Tetrabutylammonium bromide
    RL: CAT (Catalyst use); USES (Uses)
        (CO2 stabilization catalyst; manuf. of thermally insulating housings
        with H2O-blown polyurethane foams and closed cell layers for
        refrigerators)
    25067-34-9, Ethylene-vinyl alcohol copolymer
    RL: TEM (Technical or engineered material use); USES (Uses)
        (binder for closed cell layer; manuf. of thermally insulating
        housings with H2O-blown polyurethane foams and closed cell
        layers for refrigerators)
    9002-85-1, Poly(vinylidene chloride)
    RL: TEM (Technical or engineered material use); USES (Uses)
        (cellular; manuf. of thermally insulating housings with H2O-blown
        polyurethane foams and closed cell layers for refrigerators)
    124-38-9P, Carbon dioxide, uses
    RL: PNU (Preparation, unclassified); RCT (Reactant); TEM (Technical or
    engineered material use); PREP (Preparation); RACT (Reactant or reagent);
        (generated from H2O and isocyanates, reaction with epoxides; manuf. of
        thermally insulating housings with H2O-blown polyurethane foams
        and closed cell layers for refrigerators)
    9003-56-9, ABS resin
    RL: TEM (Technical or engineered material use); USES (Uses)
        (inner box; manuf. of thermally insulating housings with H2O-blown
        polyurethane foams and closed cell layers for refrigerators)
    7429-90-5, Aluminum, uses
    RL: TEM (Technical or engineered material use); USES (Uses)
        (outer box; manuf. of thermally insulating housings with H2O-blown
        polyurethane foams and closed cell layers for refrigerators)
    106-88-7, 1,2-Butylene oxide
    RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction with CO2; manuf. of thermally insulating housings with
        H2O-blown polyurethane foams and closed cell layers for
        refrigerators)
L2 ANSWER 8 OF 35 CAPLUS COPYRIGHT 2003 ACS
Full Text
    1997:191580 CAPLUS
AN
    126:187348
    Air- and moisture-permeable leather-like sheets and their manufacture
    Arai, Sei; Oosawa, Katsumi
PA Achilles Corp, Japan
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SO

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Jpn. Kokai Tokkyo Koho, 9 pp.
     CODEN: JKXXAF
DT
    Patent
LA
    Japanese
    ICM D06N003-14
IC
    ICS D06N003-18
    40-10 (Textiles and Fibers)
    Section cross-reference(s): 38, 42
FAN.CNT 1
    PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                                           -----
     JP 08337975
                      A2
                           19961224
                                           JP 1995-242422 19950828
                      B2
                           20000214
     JP 3009346
PRAI JP 1995-101692 A
                           19950403
    A process for manuf. of the title sheets for use in shoes, garments, etc.,
     comprises (A) impregnating and/or coating fibrous base materials with
     polyurethane solns. contg. polar solvent-sol. and nonpolar solvent-insol.
     synthetic resin particles (av. particle diam. 5-100 μm); (B)
     wet-coagulation of the polyurethanes in nonpolar solvents, removal of the
    solvents, washing, and drying; and (C) surface finishing. Thus, a
    nylon/polyester nonwoven fabric was impregnated with a soln. contg.
    Crisvon 8006HV (I; a polyester-polyurethane) 100, Taftic AM (II;
    polyacrylonitrile particles, av. particle diam. 7-10 \mu m) 3, surfactants
     1.0, a silicone foam stabilizer 0.5, a colorant 10, and DMF 130 parts,
     and coated with a soln. comprising I 100, II 5, surfactants 2.0, foam
     stabilizer 0.5, colorant 10, and DMF 55 parts to form a porous layer,
     washed, dried, further coated with a polyurethane surface treatment agent,
     and embossed to give a sheet showing air permeability 2.3 L/cm2-h,
     moisture permeability 2712 g/m2-24 h, good water resistance, and natural
     leather-like appearance.
    leather like sheet porous polyurethane; air permeable leather like sheet;
ST
    moisture permeable leather like sheet; nylon polyester nonwoven fabric
    artificial leather
    Urethane rubber, uses
    RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM
     (Technical or engineered material use); PROC (Process); USES (Uses)
        (Crisvon 8006HV; manuf. of air- and moisture- permeable leather-like
        sheets)
    Polyurethanes, uses
TT
     RL: PEP (Physical, engineering or chemical process); TEM (Technical or
     engineered material use); PROC (Process); USES (Uses)
        (acrylic, finishing layers; manuf. of air- and moisture- permeable
        leather-like sheets)
    Acrylic polymers, uses
     RL: PEP (Physical, engineering or chemical process); TEM (Technical or
     engineered material use); PROC (Process); USES (Uses)
        (finishing layers; manuf. of air- and moisture- permeable leather-like
        sheets)
    Polyurethanes, uses
    Polyurethanes, uses
     RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM
     (Technical or engineered material use); PROC (Process); USES (Uses)
        (fluorine-contg.; manuf. of air- and moisture- permeable leather-like
        sheets)
ΙT
    Clothing
    Coating materials
    Embossing
     Fabric finishing
     Leather substitutes
        (manuf. of air- and moisture- permeable leather-like sheets)
    Polyamide fibers, uses
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Polyester fibers, uses
    RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM
     (Technical or engineered material use); PROC (Process); USES (Uses)
        (manuf. of air- and moisture- permeable leather-like sheets)
IT
    Rayon, uses
    RL: PEP (Physical, engineering or chemical process); TEM (Technical or
     engineered material use); PROC (Process); USES (Uses)
        (manuf. of air- and moisture- permeable leather-like sheets)
    Polyurethanes, uses
    RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM
     (Technical or engineered material use); PROC (Process); USES (Uses)
        (polyester-; manuf. of air- and moisture- permeable leather-like
        sheets)
    Polyurethanes, uses
    RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM
     (Technical or engineered material use); PROC (Process); USES (Uses)
        (polyester-polyether-; manuf. of air- and moisture- permeable
        leather-like sheets)
ΤТ
    Fluoropolymers, uses
     Fluoropolymers, uses
     RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM
     (Technical or engineered material use); PROC (Process); USES (Uses)
        (polyurethane-; manuf. of air- and moisture- permeable leather-like
        sheets)
     Polyurethanes, uses
     RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM
     (Technical or engineered material use); PROC (Process); USES (Uses)
        (surface finishing agents; manuf. of air- and moisture- permeable
        leather-like sheets)
    Coagulation
IT
        (wet; manuf. of air- and moisture- permeable leather-like sheets)
    176087-58-4, Dispercoll U 53
     RL: TEM (Technical or engineered material use); USES (Uses)
        (binders; manuf. of air- and moisture- permeable leather-like
        sheets)
     9011-14-7, PMMA
                      187413-21-4, Techpolymer MB 20
     RL: MOA (Modifier or additive use); USES (Uses)
        (manuf. of air- and moisture- permeable leather-like sheets)
    143748-72-5, Crisvon Assistor FX 3D 149315-76-4, Crisvon MP 145
     173762-87-3, Resamine CU 4310
    RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM
     (Technical or engineered material use); PROC (Process); USES (Uses)
        (manuf. of air- and moisture- permeable leather-like sheets)
    79-41-4D, esters, polymers 25014-41-9, Taftic AM
                                                        122525-41-1.
     Microsphere M
    RL: MOA (Modifier or additive use); USES (Uses)
        (particles; manuf. of air- and moisture- permeable leather-like sheets)
    ANSWER 9 OF 35 CAPLUS COPYRIGHT 2003 ACS
L2
Full Text
   1995:733415 CAPLUS
AN
DN
    Inorganic silicate binder-coated rock wool thermal insulator plates for
     roofs and facades, their manufacture, and composition and use of the
     foamed coating material
    Kummermehr, Hans
IN
    Gruenzweig + Hartmann AG, Germany
PA
    PCT Int. Appl., 25 pp.
SO
    CODEN: PIXXD2
DT
    Patent
    German
LΆ
   ICM C04B041-50
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TCS C04B028-24 ICI C04B028-24, C04B024-24, C04B038-10, C04B041-50 CC 57-6 (Ceramics) FAN.CNT 4 KIND DATE APPLICATION NO. DATE PATENT NO. WO 1994-EP3735 19941111 A1 19950518 PΙ WO 9513252 W: CZ RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE A1 19950518 DE 1993-4338619 19931111 DE 4338619 DE 1994-4435915 19941007 A1 19960418 DE 4435915 A1 19960828 EP 1995-900710 19941111 EP 728124 B1 19970528 EP 728124 B2 20001227 EP 728124 R: AT, BE, CH, DE, DK, FR, GB, IT, LI, LU, NL PRAI DE 1993-4338619 A 19931111 DE 1994-4435915 A 19941007 WO 1994-EP3735 W 19941111 In the thermal insulator plates, in which the coating penetrates to a AR certain depth below the surface, the binder adheres to and surrounds the individual fibers without filling the space between the fibers such that the open surface structure is preserved. The binder, applied with a carrier liq., esp. water, that is later evapd. in the drying stage, is foamed before application. The binder is applied as a foam layer, pressed into the fibrous body of the insulators, and dried. The foamed binder contains colloidal SiO2 (solids content 40 wt.%) 25-40, synthetic resin dispersion 2-10, foaming agent 0.3-1.5, and foam stabilizer 0.05-0.5 wt.%, fireproofing agent as needed, and balance water. These thermal insulators need to be coated, esp. when used as plaster-faced, or as roof-insulating boards. During drying the foam breaks down and exposes the open surface structure of the rock wool product. The synthetic resin dispersion decreases the brittleness of the finished coating. The coating material is esp. suitable for repairing the surface of thermal insulators in back-ventilated facades. ST thermal insulator board roof facade; foam coating thermal insulator board; colloidal silica foam coating; plastic dispersion colloidal silica Polymers, uses RL: TEM (Technical or engineered material use); USES (Uses) (dispersions; inorg. silicate-based binder-coated rock wool thermal insulator plate manuf. for roofs and facades) IT Roofs (inorg. silicate-based binder-coated rock wool thermal insulator plate manuf. for) Binding materials TΤ Fireproofing agents Foaming agents (inorg. silicate-based binder-coated rock wool thermal insulator plate manuf. for roofs and facades) Building materials (facades, inorg. silicate-based binder-coated rock wool thermal insulator plate manuf. for) Thermal insulators (fibrous, boards; inorg. silicate-based binder-coated rock wool thermal insulator plate manuf. for roofs and facades) TT Coating materials (foamable, inorg. silicate-based binder-coated rock wool thermal insulator plate manuf. for roofs and facades) IT Mineral wool (thermally insulating, boards; inorg. silicate-based binder -coated rock wool thermal insulator plate manuf. for roofs and facades) 7631-86-9, Silica, uses IT

RL: TEM (Technical or engineered material use); USES (Uses)

(colloidal; inorg. silicate-based binder-coated rock wool thermal insulator plate manuf. for roofs and facades)

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L2 ANSWER 10 OF 35 CAPLUS COPYRIGHT 2003 ACS
Full Text
AN 1995:493711 CAPLUS
DN
    123:172449
    Effect of the composition of foaming dispersions on the structure and
    properties of foam printing pastes
    Hardalov, I.; Miladenova, E.; Glucharov, S.
ΑU
CS
    Bulq.
    Godishnik na Visshiya Khimikotekhnologicheski Institut, Sofiya (1993),
SO
    Volume Date 1992, 31(3), 221-9
    CODEN: GVKIAH; ISSN: 0489-6211
   Vissh Khimikotekhnologicheski Institut
PB
DT Journal
LA Bulgarian
CC 40-6 (Textiles and Fibers)
AB Effect of foam printing paste compn. was studied on the rheol.
    properties, structure, and stability of the paste. The amts. of Na
     dodecylbenzenesulfonate or polyethylene glycol dodecylphenyl ether, a
    polyacrylate dispersion (foam stabilizer), NH3, a catalyst, water,
    and pigment were optimized.
    textile foaming printing paste compn optimization
IT Acrylic polymers, uses
    RL: NUU (Other use, unclassified); USES (Uses)
        (foam stabilizer; compn. effect of foaming
        dispersions on the structure and properties of foam printing
       pastes)
    Textile printing
IT
        (foam, pastes, compn. effect of foaming dispersions on the
        structure and properties of foam printing pastes)
   158344-08-2, Helizarin Binder EJ
     RL: NUU (Other use, unclassified); USES (Uses)
        (foam stabilizer; compn. effect of foaming
        dispersions on the structure and properties of foam printing
        pastes)
     9014-92-0, Polyethylene glycol dodecylphenyl ether 25155-30-0, Sodium
     dodecyl benzene sulfonate
     RL: NUU (Other use, unclassified); USES (Uses)
        (foaming agent; compn. effect of foaming dispersions on the structure
        and properties of foam printing pastes)
L2 ANSWER 11 OF 35 CAPLUS COPYRIGHT 2003 ACS
Full Text
    1994:173081 CAPLUS
AN
   120:173081
DN
   Functions of water-soluble polymers and the present status of the
ΤI
     application to cosmetics
    Ohara, Yasuhiro; Sakuyama, Shu
ΑU
    Pola R and D Lab., Pola Corp., Yokohama, 221, Japan
CS
   Fragrance Journal (1993), 21(12), 13-21
SO
     CODEN: FUJAD7; ISSN: 0288-9803
DT
    Journal; General Review
LA
   Japanese
    62-0 (Essential Oils and Cosmetics)
CC
    A review with 32 refs. on the basic functions of water-sol. polymers as
     viscosity enhancers, dispersion stabilizers, emulsifiers, foam
     stabilizers, and binders. Also discussed are the moisturing effect of
     Na hyaluronate and the physiol. activities of Na salt of sulfated alginate
     as applied in cosmetic industry.
ST
    review cosmetic polymer
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IT
     Cosmetics
        (water-sol. polymers for)
ΙT
     Polymers, biological studies
     RL: BIOL (Biological study)
        (water-sol., for cosmetics)
     ANSWER 12 OF 35 CAPLUS COPYRIGHT 2003 ACS
L2
Full
    Text
AN
     1993:545284 CAPLUS
DN
    119:145284
    Manufacture of lightweight aerated concrete
ΤI
    Hasegawa, Kunio
IN
PA Hasegawa Kunio, Japan
SO
    Jpn. Kokai Tokkyo Koho, 3 pp.
     CODEN: JKXXAF
DT
    Patent
LA Japanese
     ICM C04B038-02
     ICS C04B018-26; C04B024-18; E04C002-04
CC
     58-2 (Cement, Concrete, and Related Building Materials)
FAN.CNT 1
                     KIND DATE
     PATENT NO.
                                        APPLICATION NO. DATE
     ______
                                         -----
     JP 05117055
                     A2 19930514
                                         JP 1991-311583 19911030
PΙ
     JP 06076261
                    B4 19940928
PRAI JP 1991-311583
                           19911030
    In the manuf. of lightwt. aerated concrete from a mix contg. cement or
     other binders, aggregates, foaming agents, and a foam stabilizer, a
     kneaded mixt. of sawdust and NaOH in water is used as the foam stabilizer.
     aerated concrete foam stabilizer; sawdust sodium hydroxide aerated
     concrete
ΙT
     Sawdust
        (sodium hydroxide-treated, for foam stabilizer in
       aerated lightwt. concrete manuf.)
TT
     Concrete
        (lightwt., aerated, manuf. of, sodium hydroxide-treated sawdust in, for
       foam stabilization)
IT
     1310-73-2, Sodium hydroxide, uses
     RL: USES (Uses)
        (sawdust treated with, for foam stabilizer in
       aerated lightwt. concrete manuf.)
L2
    ANSWER 13 OF 35 CAPLUS COPYRIGHT 2003 ACS
Full Text
   1993:23887 CAPLUS
   118:23887
   Aerosol foam marking compositions
ΤI
IN
    Smrt, Thomas J.; Mierzwinski, Walter S.
PA
    Fox Valley Systems, Inc., USA
SO
    U.S., 8 pp.
    CODEN: USXXAM
DT
   Patent
LA
   English
   ICM B01J013-00
IC
    ICS C09K003-30
NCL 252307000
    42-12 (Coatings, Inks, and Related Products)
FAN.CNT 1
    PATENT NO.
                    KIND DATE
                                        APPLICATION NO. DATE
    US 5156765
                     A
                          19921020
                                         US 1990-523886 19900515
PRAI US 1990-523886
                          19900515
```

```
Aerosol compns. which produce foam marks that remain stable for
AΒ
     ≤90 days if left undisturbed and collapse upon exposure to water
     contain propellant, water, water-insol. polymer, stabilizer (e.g.,
     fatty alcs.), and solvent for solvating the stabilizer. A typical
     compn. for mixing with a propellant contained propylene glycol mono-Me
     ether 9.08, cetyl alc. 1.19, stearyl alc. 0.59, Sipon NA-61 2, water
     43.5, Rhoplex WL 91 40.85, Cyclomide DC 212 0.95, Cosan 145 0.24, Raybo 60
     1.10, propylene glycol 0.26, and xanthan gum 0.24%.
     aerosol foam temporary marking compn; Rhoplex foam temporary marking
ST
     compn; fatty alc stabilizer foam marking; stearyl alc stabilizer
     foam marking; cetyl alc stabilizer foam marking
TT
     Stabilizing agents
       (for aerosol foam spray temporary marking compns.)
    Amines, uses
IT
     Sulfonic acids, uses
     RL: USES (Uses)
        (stabilizers, for temporary foam markings from
       aerosol sprays)
    Glycerides, uses
ΙT
     RL: USES (Uses)
        (mono-, stabilizers, for temporary foam markings
       from aerosol sprays)
ΙT
    Marking
        (temporary, aerosol spray foam, foam
       stabilizers for)
     79-10-7D, 2-Propenoic acid, esters, polymers with acrylonitrile and
IT
     styrene, uses 100-42-5D, polymers with acrylate esters and
     acrylonitrile, uses 107-13-1D, 2-Propenenitrile, polymers with acrylate
    esters and styrene, uses 89338-98-7, Rhoplex WL 91
     RL: USES (Uses)
       (binders, for aerosol foam spray temporary marking
       compns.)
TT
    112-92-5, Stearyl alcohol 36653-82-4, Cetyl alcohol
     RL: USES (Uses)
       (stabilizers, for temporary foam markings from
       aerosol sprays)
   ANSWER 14 OF 35 CAPLUS COPYRIGHT 2003 ACS
L2
Full Text
AN
   1992:428330 CAPLUS
DN
    117:28330
    Manufacture of water-absorbing polyurethane foams
ΤI
IN
    Tokunaga, Hiroshi; Meiwa, Yoshihei; Sawada, Michitaka
PA
   Kao Corp., Japan
    Jpn. Kokai Tokkyo Koho, 7 pp.
    CODEN: JKXXAF
DT
   Patent
LA Japanese
IC ICM C08J009-42
ICI C08L075-04
    38-3 (Plastics Fabrication and Uses)
     Section cross-reference(s): 35
FAN.CNT 1
                    KIND DATE
    PATENT NO.
                                         APPLICATION NO. DATE
     _____
                                         -----
                    A2 19911206
                                                          19900326
PΙ
   JP 03275744
                                         JP 1990-77744
PRAI JP 1990-77744
                          19900326
    The title foams, elastic with anisotropic expansion and water
    absorption, are manufd. by allowing polyether polyols contg. ≥40%
     polyoxyethylene units to react with polyisocyanates in the presence of a
    blowing agent, a catalyst, and a foam stabilizer, impregnating the
```

foams with hydrophilic polymer binders, and compression-molding the

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impregnated foams. Thus, a mixt. of GR 5007 (polyol, av. mol. wt. 4690,
     ethylene oxide content 70%, OH value 35.9) 37.5, PR 5007 (polyol, av. mol.
     wt. 5030, ethylene oxide content 70%, OH value 22.3) 62.5, MDI 54.5, and
     triethanolamine (crosslinker) 4.3 g was polymd. and expanded in the
     presence of a catalyst, H2O (blowing agent), and a silicone foam
     stabilizer to give foams, which were impregnated with 4.2% Sunrose
     F10MC (CM-cellulose) and pressed. The specimen had d. 0.030 before
     compression and 0.085 after compression, absorbed 25 g H2O/g, retained 4.5
     q H2O/q after centrifugation, and showed expansion 25% in X-axis, 235% in
     Y-axis, and 24% in Z-axis, and vol. expansion 5.2-fold vs. 0.032, 0.145,
     8.0, 0.7, 0, 450, 0, and 5.5, resp., for a control prepd. by one-shot
     process from G 3000B (polyol, av. mol. wt. 3000, ethylene oxide content
     0%, and OH value 56.1) and TDI.
    polyurethane foam water absorbent manuf; impregnation hydrophilic
     binder polyurethane foam; compression polyurethane foam
     Urethane polymers, preparation
     RL: TEM (Technical or engineered material use); USES (Uses)
        (cellular, manuf. of, water-absorbing)
    Absorbents
        (for water, polyurethane foams, impregnated with
        hydrophilic polymers, compressed, manuf. of)
    Molding of plastics and rubbers
        (compression, of cellular polyurethane foams impregnated with
        hydrophilic polymers)
     140236-65-3P 141183-03-1P
     RL: PREP (Preparation)
        (foams, impregnated with hydrophilic polymers, compressed,
        manuf. of, water-absorbing)
                                      9004-32-4, Carboxymethylcellulose
     9002-89-5, Poly(vinyl alcohol)
     9004-67-5, Methylcellulose
     RL: USES (Uses)
        (polyurethane foams impregnated with, compressed,
        water-absorbing)
    ANSWER 15 OF 35 CAPLUS COPYRIGHT 2003 ACS
Full Text
    1992:179819 CAPLUS
    116:179819
    Low-water-demand binder
    Udachkin, I. B.; Kovalenko, O. N.
    Stroitel'nye Materialy i Konstruktsii (1991), (2), 13
     CODEN: SMKOD5; ISSN: 0136-7773
    Journal
    Russian
    58-2 (Cement, Concrete, and Related Building Materials)
    Selection of foaming agents for cellular concrete was examd. The most
     stable foam was prepd. by using wood resin stabilized by KOH.
     Physicomech. properties of cellular concrete contg. a gypsum-free
     low-water-demand binder (LWDB) were similar to those of concrete with
    gypsum-contg. binders. To accelerate setting and plastic strength
     increase, ferrosilicon waste was added. A typical concrete mix contained
    LWDB 350, lime-sand binder 84, ferrosilicon waste 40-150, sand 416-526,
    and Al powder 1 g/kg and had a water/solids ratio of (0.36-0.49):1.
     Samples contg. clinker with a surface area of 150-290 m2/kg were subjected
     to hydrothermal treatment. With increasing clinker surface area, strength
     increased. A gypsum-free LWDB, prepd. by milling of clinker 30, quartz
     sand 70, and superplasticizer 2 wt.% (clinker basis), was recommended.
    cellular concrete binder
    Concrete
        (cellular, manuf. of, foaming agents for)
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Resins

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RL: USES (Uses)
       (wood, foaming agent from potassium hydroxide-stabilized, for cellular
    1310-58-3, Potassium hydroxide, uses
TТ
    RL: USES (Uses)
       (stabilizer, wood resin contg., foaming agent, for cellular
    ANSWER 16 OF 35 CAPLUS COPYRIGHT 2003 ACS
Full Text
    1991:662056 CAPLUS
DN
    115:262056
    Cellular or foamed hydraulic compositions
    Chao, Yen Yau Harrison; Larson, Gary Robert; Linder, Linus William;
IN
    Bauman, Michael Jo
    Rohm and Haas Co., USA
PA
   Eur. Pat. Appl., 22 pp.
SO
    CODEN: EPXXDW
DТ
   Patent
LA English
   ICM C04B024-26
    ICS C04B038-00
    58-3 (Cement, Concrete, and Related Building Materials)
FAN.CNT 1
                                       APPLICATION NO. DATE
    PATENT NO.
                    KIND DATE
                    A1 19910605 EP 1990-312702 19901121
    _____
    EP 430576
       R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
    CA 2029635 AA 19910523 CA 1990-2029635 19901109
                                        JP 1990-317611 19901121
                    A2 19910830
    JP 03199177
                                       BR 1990-5892
    BR 9005892
                    A 19910924
                                                         19901121
    AU 9066832
US 5109030
                                       AU 1990-66832
                    A1 19910530
                                                         19901122
                                       US 1991-746078 19910812
                    A 19920428
PRAI US 1989-441028
                          19891122
AB The compns. contain 25-135 wt. parts hydraulic binder and 0.01-30 wt.
    parts (based on the binder) polymeric foam stabilizer, in addn. to
    conventional components, e.g., sand, setting agents, foaming agents, and
    surfactants, for cementitious and gypsum mixes. The foam stabilizer
    consists of 0.1-0.8 wt.% of \geq 1 nonionic, ethylenically unsatd.
    monomers and 2-40 wt.% of ≥1 ionic or ionizable, ethylenically
    unsatd. monomers, and \geq 1 of the monomer(s) contains carboxylic
     acid. The compns. are esp. suitable for floors, walls, and roofs, and
    have improved foam stability, mech. strength, resistance to water, and
     sound and thermal insulating properties.
    polymeric foam stabilizer slurry; mortar cement polymeric foam
    stabilizer; gypsum slurry polymeric foam stabilizer
    Cement
TT
        (slurries, polymeric foam stabilizers for)
IT
    Foams
        (stabilizers for, polymeric, manuf. of, for cement and gypsum
       slurries)
                25035-89-6 25085-41-0, Acrylic acid-butyl acrylate-vinyl
     acetate copolymer 25230-94-8 25987-67-1 26300-51-6, Acrylic
     acid-butyl acrylate-methyl methacrylate copolymer 30231-50-6
     136190-00-6
    RL: TEM (Technical or engineered material use); USES (Uses)
        (foam stabilizer, for cement and gypsum slurries)
     9008-63-3, Daxad 19 25155-19-5D, Naphthalenesulfonic acid, salts
     25155-30-0, Siponate DS 4
     RL: USES (Uses)
        (foamed cement slurries contg., polymeric foam
        stabilizers for)
```

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13397-24-5, Gypsum, uses and miscellaneous
    RL: USES (Uses)
       (slurries, polymeric foam stabilizers for)
    39464-64-7, Wayfos M 60 57706-08-8, Aerosol A 103
IT
    RL: USES (Uses)
        (surfactant, in polymeric foam stabilizer prepn.,
       for cement and gypsum slurries)
    ANSWER 17 OF 35 CAPLUS COPYRIGHT 2003 ACS
Full Text
AN
    1990:100832 CAPLUS
    112:100832
DN
    Coatings with adhesion to phenolic resin foams
ΤI
    Seki, Katsuto; Yonekubo, Yoshibumi
IN
    Bridgestone Corp., Japan
PA
    Jpn. Kokai Tokkyo Koho, 3 pp.
SO
    CODEN: JKXXAF
DT
    Patent
LA
    Japanese
    ICM C09D003-74
    ICS B05D007-24
    42-10 (Coatings, Inks, and Related Products)
    Section cross-reference(s): 37, 38
FAN.CNT 1
                 KIND DATE
    PATENT NO.
                                       APPLICATION NO. DATE
    _____
                                         _____
    JP 01188572 A2 19890727 JP 1987-240321 19870924
PΤ
PRAI JP 1987-240321 19870924
    The title coatings, which inhibit corrosion of substrates and have good
    adhesion to phenolic resin foams, comprise 70-150 parts Al2O3 and 100
    parts vinyl acetate polymer (I) emulsion as a binder. The coatings are
    formed on inorg. or metal surfaces, and resol resin foams are prepd. on
    the surfaces of the coatings. A mixt. of CH 2 (I emulsion) 100, Al2O3
     (AD-13P) 120, and water 20 parts was coated (1.2 kg/m2) on a concrete
    surface, and a resol resin compn. contg. F-113 (blowing agent) and a
    foam stabilizer was applied and expanded to give a foam layer having
    adhesion ≥1.0 kg/m2, vs. ≤1.0 when the coating contained 50
    parts Al2O3.
    polyvinyl acetate adhesion phenoplast; phenoplast foam adhesion
    improver; alumina adhesion phenoplast foam; corrosion prevention
    phenoplast foam; metal adhesion phenoplast foam; concrete adhesion
    phenoplast foam
TΤ
    Concrete
       (coatings on, for adhesion to phenoplast foams)
TT
    Coating materials
       (anticorrosive, poly(vinyl acetate)-alumina, on surfaces for bonding to
       phenoplast foam)
IT
    Phenolic resins, uses and miscellaneous
    RL: USES (Uses)
       (resol, cellular, metal and inorg. surfaces contg. coatings with
       adhesion to)
IT
    125622-00-6, CH 2 (adhesive)
    RL: USES (Uses)
       (coating by, of metal and concrete, for adhesion to phenoplast
       foams)
TT
    1344-28-1, Aluminum oxide, uses and miscellaneous
    RL: USES (Uses)
       (coatings contg., anticorrosive, with adhesion to phenoplast
       foams)
    7439-89-6, Iron, uses and miscellaneous
    RL: USES (Uses)
        (phenoplast foam prepn. on surface of, coatings for adhesion
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in)

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ANSWER 18 OF 35 CAPLUS COPYRIGHT 2003 ACS
Full Text
    1990:61821 CAPLUS
ΑN
DN
    112:61821
    Wetting method for cement- or gypsum-bonded fiber-containing building
TI
    materials
IN
    Ries, Hans B.
    Maschinenfabrik Gustav Eirich, Fed. Rep. Ger.
PΑ
so
    Eur. Pat. Appl., 5 pp.
    CODEN: EPXXDW
DT
    Patent
LA
    German
IC
    ICM C04B040-00
    ICS B28C005-00
    58-4 (Cement, Concrete, and Related Building Materials)
CC
FAN.CNT 1
    PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
                                         _____
     _____
    EP 338548
                    A2 19891025
                                         EP 1989-107090
                                                        19890420
    EP 338548
                    A3 19901205
        R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE
    DE 3813341 A1 19891102 DE 1988-3813341 19880421
                                         JP 1989-96565
                                                         19890418
                    A2 19891211
    JP 01306206
    US 5049196 A 19910917
CA 1334027 A1 19950117
                                        US 1989-341049
                                                          19890420
                    A1 19950117
                                        CA 1989-597271 19890420
                         19880421
PRAI DE 1988-3813341
AB In the title process, water is added, at least partially, in the form of
    a foam contg. ≥1 surfactants and ≥1 foam-stabilizing
    agents, or by foaming the mixt. of building materials with ≥1
    surfactants and ≥1 foam-stabilizing agent, and the water is
    added in amts. such that the material is powd.-crumbly in the melted
    condition. This method eliminates the formation of lumps, and is esp.
    useful for melting cement-cellulose fiber (paper) mixts. Using gypsum 60,
    cellulose fibers (paper) 12, and foam 24 kg (200-260 L), the total
    wetting process took 190 s.
    gypsum cellulose fiber wetting foam; surfactant foam stabilizer; CM
ST
    cellulose foam stabilizer
IT
    Paper
        (fibers, mixts., contg. cement or gypsum and, with foam, for
       lump-formation prevention)
TТ
    Gelatins, uses and miscellaneous
    RL: USES (Uses)
       (foam-stabilizing agents, in wetting of cement- and
       gypsum-fiber mixts. with foam, for lump-formation prevention)
IT
       (foaming with, of surfactant-foam stabilizing agent mixts.,
       for wetting of cement- and gypsum-fiber mixts.)
IT
    Stabilizing agents
       (for foam, in wetting of cement- and gypsum-fiber mixts. with
       foam, for lump-formation prevention)
TΤ
    Cement
       (mixts. contg. fibers and, wetting of, with foam, for
       lump-formation prevention)
    Wetting
IT
       (of cement- and gypsum-fiber mixts., with foam, for
       lump-formation prevention)
TΤ
    Foaming
       (of surfactant-foam stabilizing agent mixts., for wetting of
       cement- and gypsum-fiber mixts.)
IT
    Fibers
```

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RL: USES (Uses)
        (paper, mixts. contg. cement or gypsum binder and, with
       foam, for lump-formation prevention)
    9002-89-5, Poly(vinyl alcohol)
                                   9004-32-4, Carboxymethyl cellulose
IT
    9004-34-6D, Cellulose, ethers
    RL: USES (Uses)
       (foam-stabilizing agent, in wetting of cement- and
       gypsum-fiber mixts. with foam, for lump-formation prevention)
    9004-53-9, Dextrin 9005-32-7D, Alginic acid, salts
    RL: USES (Uses)
       (foam-stabilizing agents, in wetting of cement- and
       gypsum-fiber mixts. with foam, for lump-formation prevention)
TΤ
    7732-18-5
    RL: USES (Uses)
       (wetting, of cement- and gypsum-fiber mixts., with foam, for
       lump-formation prevention)
    ANSWER 19 OF 35 CAPLUS COPYRIGHT 2003 ACS
L2
Full Text
    1989:618593 CAPLUS
AN
DN
    111:218593
ΤI
    Molded building materials and their manufacture
IN
    Veldhoen, Hendrikus
PA
    Neth.
    Neth. Appl., 9 pp.
SO
    CODEN: NAXXAN
DT
    Patent
LΑ
    Dutch
    ICM C04B028-02
IC
    58-4 (Cement, Concrete, and Related Building Materials)
FAN.CNT 1
    PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
     _____
                                         -----
    NL 8800339
                                                        19880211
                     Α
                          19890901
                                         NL 1988-339
                     В
                        19900316
    NL 185916
                     C 19911216
    NL 185916
                     A1 19910306
    EP 414965
                                         EP 1989-202227 19890901
        R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, SE
                         19880211
PRAI NL 1988-339
    The title materials comprise a binder contg. an aluminosilicate
    component and an alkali metal silicate-alkali component, with SiO2/(Na2O +
    K2O) ratio 1.0-2.0. The manufg. process comprises forming mixts. contg. a
    SiO2-based accelerator in a mold, heating the mixts. by microwaves, and
    demolding the shaped products. This method saves energy, and is esp.
    suitable for the manuf. of bricks, cobblestones, and floor and wall
    components, and the products do not exhibit reversible moisture-induced
    shrinkage, whereas post-manufg. shrinkage is negligible. A mixt. having
    SiO2/(Na2O + K2O) ratio 1.0 and consisting of fly ash filler 350, fly ash
    binder 450, SiO2 fume 65, Na metasilicate (ratio 1:1) 60, portland
    cement 20, foaming agent 5, foam stabilizer 2, and water 50 g, and
    polystyrene beads 2 L, gave shaped articles having bulk d. 400 g/cm3.
    alkali aluminosilicate silicate building material; alkali metal silicate
    binder; alkali binder; water glass binder; silica fume accelerator
    building material; foaming agent accelerator building material; foam
     stabilizer accelerator building material; microwave hardening
    accelerator building material; binder accelerator building material
    Alkali metal hydroxides
    Aluminosilicates, uses and miscellaneous
    RL: USES (Uses)
        (binders contg., in molded building material, for dimensional
       stability)
```

Microwave, chemical and physical effects

IT

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(heating and hardening by, in molded building material manuf.)
    Foaming agents
       (in molded building material, with binders for dimensional
       stability)
    Building materials
IT
       (ceramic, lightwt., molded, alkali-alkali metal silicate and
       aluminosilicate binders in manuf. of, for dimensional
       stability)
    Ashes (residues)
IT
       (fly, binders contg., in molded building material, for
       dimensional stability)
    Building materials
IT
       (molded, alkali-alkali metal silicate and aluminosilicate
       binders in manuf. of, for dimensional stability)
IT
    Cement
       (portland, binders contg., in molded building material, for
       dimensional stability)
    1335-30-4
IT
    RL: USES (Uses)
       (aluminosilicates, binders contg., in molded building
       material, for dimensional stability)
    9003-53-6
ΙT
    RL: USES (Uses)
       (beads, in molded building material, with binders for
       dimensional stability)
                                   1344-09-8, Water glass
    1312-76-1, Potassium silicate
TΤ
    6834-92-0, Sodium metasilicate 10006-28-7, Potassium metasilicate
    RL: USES (Uses)
        (binders contg., in molded building material, for dimensional
       stability)
    60676-86-0, Vitreous silica
IT
    RL: USES (Uses)
        (fume, accelerator, in molded building material, with binders
       for dimensional stability)
    7722-84-1, Hydrogen peroxide, uses and miscellaneous
    RL: USES (Uses)
        (in molded building materials, with binders for dimensional
       stability)
    7429-90-5, Aluminum, uses and miscellaneous
    RL: USES (Uses)
        (powd., in molded building material, with binders for
        dimensional stability)
    ANSWER 20 OF 35 CAPLUS COPYRIGHT 2003 ACS
Full Text
    1989:236351 CAPLUS
AN
    110:236351
DN
    Method of foaming gas concrete mixes
ΤI
    Jatymowicz, Hanna; Zapotoczna-Sytek, Genowefa; Skrzypek, Jan; Przepiera,
IN
     Stefan; Kuzko, Antoni; Piechocki, Ryszard
     Instytut Techniki Budowlanej, Pol.; Centralny Osrodek Badawczo-Rozwojowy
PA
     Przemyslu Betonow "Cebet"
     Pol., 3 pp.
SO
     CODEN: POXXA7
DT
    Patent
    Polish
T.A
    ICM C04B038-02
TC
    58-2 (Cement, Concrete, and Related Building Materials)
CC
FAN.CNT 1
                                          APPLICATION NO. DATE
                     KIND DATE
     PATENT NO.
     _____
                                          _____
                                          PL 1984-247320 19840419
PI PL 141747
                     B1 19870831
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19840419
PRAI PL 1984-247320
    The concrete mix is foamed by addn. of metal powder in the presence of a
    Na sulfosuccinate and/or Na dioctyl sulfosuccinate stabilizer 3-30 g per
    100 L makeup H2O at 90°. The cellular structure and its vol. d.
    are stabilized in a predetd. time interval. Gas bubble generation,
    slaking, and setting processes are synchronized and controlled. This
    method is suitable for gas concrete mixes based on various proportions of
    ground quicklime, cement, gypsum, fly ash, sulfate compds., and
    detergents. Obtainable vol. d. is 350-520 kg/m3. Thus, 1 m3 of gas
    concrete with vol. d. of 500 kg/m3 is produced by mixing of 40°
    makeup water 270 L, detergent (mixt. of neutralized carboxylic acids)
     0.5 L, fly ash, 350 kg, binder obtained by milling of quicklime, gypsum,
    and ash, 250 kg, a mixt. of FeSO4, Na2SO4, and KCl (1:1:1), 0.6 kg, a
     suspension of Al powder contg. neutralized carboxylic acids 1200 cm3 per
     400 g of Al powder, and Na sulfosuccinate 9 g.
    foaming agent concrete stabilizer; sodium sulfosuccinate foaming
    concrete; sodium dioctyl sulfosuccinate foaming concrete
    Lime (chemical)
IT
    RL: USES (Uses)
        (gas concrete contg.)
    Sulfonic acids, uses and miscellaneous
ΤТ
    RL: USES (Uses)
        (alkylarene, detergents, in concrete foaming process)
    Ashes (residues)
IT
        (fly, gas concrete contg.)
    Carboxylic acids, compounds
IT
    RL: USES (Uses)
        (salts, suspension contg., in concrete foaming process)
     37300-00-8, Sulfapol
     RL: USES (Uses)
        (detergent, in concrete foaming process)
     577-11-7, Sodium dioctyl sulfosuccinate 20526-58-3
IT
     RL: USES (Uses)
        (dispersing agent, in concrete foaming process)
     7447-40-7, Potassium chloride, uses and miscellaneous
                                                             7647-14-5, Sodium
TΨ
     chloride, uses and miscellaneous
                                       7720-78-7, Ferrous sulfate 7757-82-6,
     Sodium sulfate, uses and miscellaneous
     RL: USES (Uses)
        (foam stabilizer contq., in concrete foaming
        process)
    13397-24-5, Gypsum, uses and miscellaneous
ΙT
     RL: USES (Uses)
        (gas concrete contg.)
     7429-90-5, Aluminum, uses and miscellaneous
     RL: USES (Uses)
        (powd., foamed concrete contg.)
     25155-19-5D, Naphthalenesulfonic acid, dialkyl derivs.
TT
     RL: USES (Uses)
        (surfactant, in concrete foaming process)
    ANSWER 21 OF 35 CAPLUS COPYRIGHT 2003 ACS
Full Text
    1988:515046 CAPLUS
AN
    109:115046
     Manufacture of thermoinsulating refractory materials
ΤI
     Popa, Genoveva; Dragomir, Constantin; Szabo, Andrei
IN
     Institutul de Cercetari Metalurgice (ICEM), Rom.
PA
     Rom., 4 pp.
     CODEN: RUXXA3
     Patent
DT
    Romanian
LA
IC
     ICM C04B021-02
```

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CC 57-6 (Ceramics)
FAN.CNT 1
                                          APPLICATION NO. DATE
    PATENT NO.
                     KIND DATE
     _____
                     B1
                          19870930
                                          RO 1985-119593 19850718
ΡI
    RO 92513
PRAI RO 1985-119593
                           19850718
    The thermoinsulating refractory materials, permeable to gases and liqs. at
    -250 to +1000° are produced by impregenation of aq. foams (esp.
    polymethanic foams) with an aq. slip contg. a refractory component, a
    chem. binder, and setting stabilizers and accelerators. Excess slip
    is sepd. by centrifuging or rolling in several steps, and the resulting
    cellular structure is dried at 120° for 1 h, heated to 1000°
    at 30°/h and to 1250-1800° at 100°/h, calcined at
    1250-1800° for 2-4 h, optionally surface treated either by (1)
    plasma coating with carbides and/or nitrides or by (2) impregnation with a
    mixt. contg. 3-15 Si3N4, 85-97% SiC, and aq. soln. contg. 20% Al
    phosphate, 30% AlCl3, and colloidal SiO2 with 30% SiO2, and heat-treated
    at 600°. Thus, aq. foam was impregnated for 0.5-1 min with an
    aq. slip, (viscosity 1000-40000 cP at 25°) contg. refractory clay
     (e.g., kaolin) 5-50, hydrated alumina, liq. components contg. H3PO4, Al
    phosphate, Na tripolyphosphate, and Na hexametaphosphate in combination
    with Al2O3 sol and SiO2 sol dild. with water, and hardening accelerators
     (e.g., Me2SiF6, MgO, MgCl2). Excess slip was removed by centrifuging or
    rolling, and the composite thickness was decreased 25-50% in the 1st stage
    and 50-90% in the 2nd stage. The composite was dried at 120° for 1
    h, calcined at 1250-1800° for 2-4 h, coated with a mixt. of Si3N4
    3-15 and SiC 95-97%, which was dild. with an aq. soln. (contg. 20% Al
    phosphate, Al tripolyphosphate, AlCl3, and colloidal silica), and heat
    treated in an inert atm. at 600°. The product was suitable for
    filtration of molten Al.
ST
    permeable thermoinsulating refractory manuf
IT
    Refractories
       (gas- and liq.-permeable, manuf. of)
IT
    Carbides
    Nitrides
    RL: USES (Uses)
        (plasma-coating with, in manuf. of gas- and liq.-permeable
       thermoinsulating refractories)
IT
    Polyphosphoric acids
    RL: USES (Uses)
       (sodium salts, binder, in gas- and liq.-permeable
       thermoinsulating refractory)
    471-34-1, Calcium carbonate, uses and miscellaneous 546-93-0, Magnesium
    carbonate 1344-09-8, Sodium silicate (unspecified) 7487-88-9,
    Magnesium sulfate, uses and miscellaneous 7664-38-2, uses and
    miscellaneous 7758-29-4, Sodium tripolyphosphate 7778-18-9, Calcium
    sulfate
    RL: USES (Uses)
       (binder, in gas- and liq.-permeable thermoinsulating
ΙT
    1309-48-4, Magnesia, uses and miscellaneous 7786-30-3, Magnesium
    chloride, uses and miscellaneous 16893-85-9, Sodium hexafluorosilicate
    RL: USES (Uses)
       (hardening accelerator, in manuf. of gas- and liq.-permeable
       thermoinsulating refractories)
    12033-89-5P, Silicon nitride, preparation 409-21-2, Silicon carbide,
    uses and miscellaneous 7446-70-0, Aluminum chloride, uses and
                    7631-86-9, Silica, uses and miscellaneous 98499-64-0,
    miscellaneous
    Aluminum phosphate
    RL: PREP (Preparation)
       (impregnation with, in manuf. of gas- and liq.-permeable
       thermoinsulating refractories)
```

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IT
    7429-90-5P, Aluminum, preparation
    RL: PUR (Purification or recovery); PREP (Preparation)
       (purifn. of, filtration for, gas- and liq.-permeable refractories for)
    1344-21-4P 1308-38-9P, Chromium oxide (Cr2O3), uses and miscellaneous
    1309-42-8P, Magnesium hydroxide 1314-23-4P, Zirconia, uses and
    miscellaneous
    RL: PREP (Preparation)
       (refractories, gas- and liq.-permeable, manuf. of)
    21645-51-2, Aluminum hydroxide, uses and miscellaneous
    RL: USES (Uses)
       (thermoinsulating refractory, gas-and liq.- permeable)
    ANSWER 22 OF 35 CAPLUS COPYRIGHT 2003 ACS
Full Text
    1985:47544 CAPLUS
AN
DN
    102:47544
ΤI
    Foamed ink composition
IN
    Norman, Edward C.
PΑ
    Foamink Co., Inc., USA
    U.S., 9 pp. Cont.-in-part of U.S. Ser. No. 360,757, abandoned.
SO
    CODEN: USXXAM
DT
    Patent
    English
LA
    C08J009-30
IC
NCL 521065000
    42-12 (Coatings, Inks, and Related Products)
CC
FAN.CNT 2
                    KIND DATE
                                         APPLICATION NO. DATE
    PATENT NO.
     _____
                                         ______
    US 4482648
                    Α
                         19841113
                                       US 1982-419232 19820917
PΙ
    EP 89615
                    A1 19830928
                                         EP 1983-102604 19830316
                    B1 19870624
    EP 89615
        R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE
                E 19870715 AT 1983-102604 19830316
    AT 27977
    CA 1190809
                    A1 19850723
                                        CA 1983-424103 19830321
    JP 59015460
JP 02009632
                                        JP 1983-47776
                    A2 19840126
                                                       19830322
                    B4 19900302
PRAI US 1982-360757
                          19820322
    US 1982-419232
                          19820917
    EP 1983-102604
                          19830316
    Water-based inks foamable by compressed gases, useful in application to
    gravure cylinders, contain foaming agents and pseudoplastic additives
    which promote ink-qas mixing and foam stability. Thus, an ink contg.
    35% Sunsperse Yellow YFD1123 10.00, 55% vinyl acrylic latex emulsion
    10.00, high-expansion foam conc. 0.45, NH4 stearate [1002-89-7]
     (stabilizer) 5.00, silicone surfactant (L-7129) 0.08, and Xanthan gum
     [11138-66-2] (Kelco K8Al3, pseudoplastic additive) 0.10% (as solids) was
    mixed with water, foamed, and successfully coated on a paper web.
    foam ink formulation; thickener ink foamable; xanthan gum thickener ink;
    stabilizer ink foamable; stearate ammonium stabilizer ink
    Siloxanes and Silicones, uses and miscellaneous
IT
    RL: USES (Uses)
       (surfactants, in foamed inks)
IT
    Inks
       (foamable, formulation of)
    9003-08-1 9003-20-7
TΨ
    RL: USES (Uses)
       (binders, for foamed inks)
TТ
    107-21-1, uses and miscellaneous
    RL: USES (Uses)
       (conditioner, for foamed inks)
IT
    11138-66-2
```

```
RL: USES (Uses)
       (pseudoplastic additive, for foamed inks)
    1002-89-7
IT
    RL: USES (Uses)
       (stabilizer, for foamed inks)
    ANSWER 23 OF 35 CAPLUS COPYRIGHT 2003 ACS
Full Text
AN 1983:94685 CAPLUS
DN
    98:94685
    Spray-molding of inorganic fiber-containing lightweight materials
ΤI
    Asahi Asbestos Co., Ltd., Japan
PA
    Jpn. Kokai Tokkyo Koho, 3 pp.
    CODEN: JKXXAF
DT
    Patent
LA
    Japanese
TC
    B05D007-00
    58-4 (Cement, Concrete, and Related Building Materials)
FAN.CNT 1
                                        APPLICATION NO. DATE
    PATENT NO.
                   KIND DATE
                                        _____
    _____
                     A2 19820906
                                        JP 1981-30836 19810304
    JP 57144067
                     B4 19840508
    JP 59019747
PRAI JP 1981-30836
                          19810304
   A mixt. contg. inorg. fibers and a hydraulic binder at a (35-70):(30-65)
    wt. ratio is mixed with 150-300% water, mixed with a foaming agent 1-3
    and a foam stabilizer 0.2-1% (based on the water), supplied through
    a conduit, spray-molded by compressed air, and hardened. Thus, a 60:40
    rock wool-cement mixt. was mixed with 250% water, mixed with a
    surfactant 2 and a thickening agent 0.2%, supplied through a conduit,
    spray-molded, and hardened to obtain a lightwt. material having d. 0.68.
    rock wool cement building material
ST
    Mineral wool
ΙT
       (building materials from cement and, lightwt., by spray molding)
IT
    Cement
       (building materials from mineral wool and, lightwt., by spray molding)
    Building materials
TΤ
       (lightwt., from cement and mineral wool by spray molding)
   ANSWER 24 OF 35 CAPLUS COPYRIGHT 2003 ACS
L2
Full Text
    1982:587247 CAPLUS
AN
DN
    97:187247
ΤI
    Manufacture of inorganic porous materials
    Onoda Cement Co., Ltd., Japan
PA
    Jpn. Kokai Tokkyo Koho, 3 pp.
     CODEN: JKXXAF
DT
    Patent
    Japanese
LA
     C04B021-02; C04B021-10
    58-4 (Cement, Concrete, and Related Building Materials)
FAN.CNT 1
                   KIND DATE
                                        APPLICATION NO. DATE
     PATENT NO.
                                        _____
     _____
                     A2 19820623
                                        JP 1980-177125 19801217
     JP 57100966
                     B4 19880906
     JP 63044714
                         19801217
PRAI JP 1980-177125
    In the manuf. of inorg. porous materials from an inorg. binder slurry
     contg. foaming agent, a water-sol. silicone oil as foam stabilizer
     is added to the inorg. binder slurry. Thus, a mortar contg. cement 100,
     fly ash 258, perlite 40, and water 63 parts was mixed with a 2% foaming
```

agent soln. contg. 300 ppm polyether-modified silicone oil, foamed,

molded, and steam-cured to obtain a lightwt. test piece having d. 0.95, compressive strength 124, and bending strength 18 kg/cm2. stsilicone oil lightwt mortar ΙT Perlite RL: USES (Uses) (in mortar, with polyether-modified siloxane foaming-stabilizing agent) Siloxanes and Silicones, uses and miscellaneous IT RL: USES (Uses) (polyether-modified, foaming-stabilizing agents, for mortar contg. fly ash and perlite) IT Foaming agents (siloxanes, polyether-modified, for mortar contg. fly ash and perlite) Ashes (residues) IT (fly, in mortar, with polyether-modified siloxane foaming agent) IT Mortar (lightwt., contg. fly ash and perlite and foamed polyether-modified siloxanes) ANSWER 25 OF 35 CAPLUS COPYRIGHT 2003 ACS L2Full Text 1982:549565 CAPLUS AN 97:149565 DN ΤI Inorganic foam Jackson, Graham Vincent; Goulding, Terence; Bradbury, John Albert Avery IN Imperial Chemical Industries PLC, UK PA S. African, 53 pp. SO CODEN: SFXXAB DT Patent LA English IC ICS B32; C04 ICI B01 57-5 (Ceramics) Section cross-reference(s): 58 FAN.CNT 1 APPLICATION NO. DATE PATENT NO. KIND DATE ----\_\_\_\_\_ ZA 1981-73 19810106 ZA 8100073 A 19820127 PΙ A1 19810716 AU 1981-66128 AU 8166128 19810109 19840614 AU 537193 B2 A1 19820801 ES 1981-498411 19810109 ES 498411 A1 19820128 DE 1981-3100655 19810112 DE 3100655 C2 19861002 DE 3100655 A1 19831213 CA 1981-368610 19810115 CA 1158679 A1 19830116 ES 1982-509746 19820219 ES 509746 DD 1983-228588 19830511 DD 160185 С 19830511 PRAI GB 1981-8008 19800110 kaolinite or kaolin-contg. clay, montmorillonite, and/or sepiolite which are bonded with H3PO4 or a phosphate, Na silicate, or an org. binder.

REAI GB 1981-8008

Rigid forms of d. <0.4 g/mL, for insulation or as fire-protection material consist of prills of layered clay minerals, e.g., delaminated vermiculite, kaolinite or kaolin-contg. clay, montmorillonite, and/or sepiolite which are bonded with H3PO4 or a phosphate, Na silicate, or an org. binder. The foam is prepd. by foaming a suspension of the minerals in a liq. medium (MgO may be added as a stabilizer and for compressive strength), removal of at least part of the liq., and sintering at 1200°. Pressure may be used to consolidate the prills. Thus, a mixt. of kaolin clay 60 g, deionized water 240 mL, and Forafac 1157 [65256-46-4] foaming agent 0.2 wt.% (of kaolin), was beaten for 40 min in a good mixer to give a wet foam of wet d. 240 kg/m3. The wet foam was molded, left for 24 h, and heated at ~60° (shrinkage 9%) to give a dry rigid foam of d. 75 kg/m3. This foam was placed in a furnace at 600° and the temp. raised to 1150° for 30 min to give a sintered foam of d. 90 kg/m3 and compressive strength 200 kN/m2 at 20% compression.

```
clay mineral foam material; kaolin foam material insulator
ST
IT
     Kaolin, uses and miscellaneous
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (foam material prepn. from, rigid)
     Ceramic materials and wares
     Fire-resistant materials
     Thermal insulators
        (foam, rigid, from clay minerals)
     Clays, uses and miscellaneous
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (ball, foam material prepn. from, rigid)
     Clays, uses and miscellaneous
IT
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (fire-, foam material prepn. from, rigid)
     Clays, uses and miscellaneous
IT
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (kaolinitic, foam material prepn. from, rigid)
TT
     7664-38-2, uses and miscellaneous 7758-29-4
     RL: USES (Uses)
        (binder, in clay mineral rigid foam prepn.)
     1318-00-9 1318-74-7, uses and miscellaneous
                                                    1318-93-0, uses and
     miscellaneous 63800-37-3
     RL: USES (Uses)
        (foam material prepn. from, rigid)
IT
     65256-46-4
     RL: USES (Uses)
        (foaming agent, in clay mineral rigid foam prepn.)
IT
     139-07-1
     RL: USES (Uses)
        (surface active agents, in clay mineral rigid foam prepn.)
    ANSWER 26 OF 35 CAPLUS COPYRIGHT 2003 ACS
L2
Full Text
     1979:597928 CAPLUS
AN
DN
     91:197928
TI
     Low density insulating compositions containing combusted bark particles
IN
     Sterrett, Robert W.; Shu, Larry S.; Ostertog, Robert J.
     Grace, W. R., and Co., USA
PA
     U.S., 7 pp.
SO
     CODEN: USXXAM
DT
     Patent
LA English
IC
    C04B007-35
NCL 106093000
     58-5 (Cement and Concrete Products)
ככ
FAN.CNT 1
                                          APPLICATION NO. DATE
     PATENT NO.
                    KIND DATE
                     ____
     _____
PI US 4166749
                      A 19790904
                                          US 1978-867037 19780105
                           19780105
PRAI US 1978-867037
     Lightwt. thermal insulators are prepd. from binders, e.g. portland
     cement, and partially combusted bark particles with conventional additives
     such as surfactants, foam stabilizers, and aggregates. Thus, portland
     cement 60.3, combusted bark 31.5, expanded vermiculite [1318-00-9] 8,
     \alpha\text{-olefin} sulfonate 0.17 wt.%, and water were mixed 2 min to wet d.
     49.8 lb/ft3 and addnl. \alpha-olefin sulfonate was added to give d. 41.2
     and 41.6 lb/ft3 after 1 and 2 min, resp.
     bark cement thermal insulator -
ST
IΤ
     Bark
        (combusted particles, thermal insulators, contg. cement and
        vermiculite)
IT
     Cement
```

```
(thermal insulators, contq. combusted bark particles and vermiculite)
IT
     Thermal insulators
        (lightwt., cement, contq. combusted bark particles and vermiculite)
IT
     1318-00-9
     RL: USES (Uses)
        (expanded, thermal insulators, contg. cement and combusted bark
        particles)
     ANSWER 27 OF 35 CAPLUS COPYRIGHT 2003 ACS
Full Text
AN
     1976:409734 CAPLUS
DN
     85:9734
TI
     Porous building materials containing silicate
IN
     Abe, Kenichi
PA
     Japan
so
     Jpn. Kokai Tokkyo Koho, 2 pp.
     CODEN: JKXXAF
DT
     Patent
LΑ
     Japanese
IC
     C04B
CC
     58-5 (Cement and Concrete Products)
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
     _______
                                           ______
     JP 50084623
                           19750708
                                           JP 1973-132777
PΙ
                      A2
                                                           19731128
PRAI JP 1973-132777
                           19731128
    Porous silicate materials are prepd. by mixing fillers such as SiO2
     [7631-86-9] and Al2O3 powders with water glass (a binder), Na
     silicofluoride [16893-85-9] (a hardening agent), a hydrophobic fatty acid
     salt (a foam stabilizer), and a metal silicate or metal-silicon compd.
     (a foaming agent). Thus, silica powder (325 mesh) 100, Na silicate 75,
     H2O 26, Ca stearate [1592-23-0] 0.5, metallic Si [7440-21-3] (400 mesh) 1,
     and Na silicofluoride (250 mesh) 16 parts were mixed for 3-10 min and
     poured into a mold. Foams were produced within 60 min. The products
     were dried for 3 days. The d. was 0.22 and the diam. of pores were
     0.5-2.0 mm.
ST
     silicate porous building material; stearate silicate porous building
     material; fatty acid silicate building material
IT
     Foams
        (contg. silica)
IT
     Foams
        (silica-sodium silicate)
     7440-21-3, uses and miscellaneous
     RL: USES (Uses)
        (foaming agents, for silica-sodium silicate compn.)
IT
     7631-86-9, uses and miscellaneous
     RL: USES (Uses)
        (foams, contg. sodium silicate)
     16893-85-9
IT
     RL: USES (Uses)
        (hardening agents, for silica-sodium silicate foams)
     1592-23-0
TT
     RL: USES (Uses)
        (stabilizers, for silica-sodium silicate foams)
     ANSWER 28 OF 35 CAPLUS COPYRIGHT 2003 ACS
1.2
Full Text
     1976:184206 CAPLUS
ΑN
DN
     84:184206
ΤI
     Silicate foam
IN
    Abe, Kenichi
PΑ
     Japan
```

```
Jpn. Kokai Tokkyo Koho, 2 pp.
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
TC
     C04B
CC
    58-5 (Cement and Concrete Products)
FAN.CNT 1
     PATENT NO.
                    KIND DATE
                                        APPLICATION NO. DATE
     ______
                                        ______
     JP 51028114
                    A2 19760309
PΙ
                                        JP 1974-99970 19740902
PRAI JP 1974-99970
                         19740902
    Silicate foams which contain fine pores and are useful as heat
     insulating materials are made from slurries contg. alkali metal silicate
     (binder), Na2SiF6 [16893-85-9] (hardener), siliceous material (filler),
     a hydrophobic fatty acid salt (air bubble stabilizer), and metallic Si
     or its compds. (foaming agent). Thus a slurry contg. Na silicate 100,
    water 20, Ca stearate 0.5, Na2SiF6 (250 mesh) 20, powd. siliceous stone
     (325 mesh) 40, and metallic Si (325 mesh) 1.3 parts was poured into a mold
     and dried to obtain a silicate foam having sp. gr. 0.18 and contg. fine
    pores 0.1-1.5 mm.
    sodium fluorosilicate silicate foam; siliceous stone silicate foam;
     calcium stearate silicate foam; silicon silicate foam; heat insulator
     silicate foam
TΤ
    Thermal insulators
        (sodium silicate-based foam, contg. siliceous stone and
       sodium hexafluorosilicate)
IT
    1344-09-8
    RL: USES (Uses)
        (foams, contq. siliceous stone and sodium hexafluorosilicate
       for thermal insulators)
IT
    16893-85-9
    RL: USES (Uses)
        (in sodium silicate-based foams, for thermal insulators)
    ANSWER 29 OF 35 CAPLUS COPYRIGHT 2003 ACS
Full Text
AN
    1975:595146 CAPLUS
   83:195146
DN
ΤT
    Binder mixture and method for cementing the fibers of textile materials
IN
   Van Dorp, Teunis
    Shell Internationale Research Maatschappij B. V., Neth.
PA
SO
    Ger. Offen., 16 pp.
    CODEN: GWXXBX
DT
    Patent
LA
   German
IC D06M
CC
    39-10 (Textiles)
FAN.CNT 1
    PATENT NO. KIND DATE
                                      APPLICATION NO. DATE
    -----
ÞΤ
    DE 2455696 A1 19750528
                                       DE 1974-2455696 19741125
    BE 822443
                   A2 19750521
                                        BE 1974-1006287 19741121
    NL 7415326
                   A 19750528
                                        NL 1974-15326 19741125
    GB 1492535
                   A 19771123
                                        GB 1973-54680
                                                        19741125
PRAI GB 1973-54680
                         19731126
    The fibers in textile materials are cemented together by treating with a
    foam mixt. contg. sulfolane (I) [126-33-0], water (≥8%), a
    nonionic wetting agent, and a foam stabilizer, coconut oil
    diethanolamide (II), followed by a heat treatment at elevated temp. For
```

example, to stabilize a pile fabric and to bind the piles to a backing (both acrylic yarns) the back side of the backing material was treated with a stabilized **foam** contg. I 100, water 33, a nonionic wetting

```
agent Nonidet LE [57125-92-5] 0.07, and II 1.3 parts. The pile material
     was then heat-treated at 90° for 15 min.
     textile binder foam; sulfolane textile binder; coconut oil
ST
     diethanolamide binder; surfactant nonionic binder
    Textiles
IT
     Acrylic fibers
     RL: USES (Uses)
        (binders for, sulfolane-contg. foams as)
TТ
     Coconut oil
     RL: USES (Uses)
        (diethanolamides, stabilizers for textile binder
        foams)
IT
     Surfactants
        (nonionic, in textile binder foams)
IT
    Binding materials
        (sulfolane-contg. foams, for textiles)
     126-33-0 57125-92-5
IT
     RL: USES (Uses)
        (binder foams contg., for textiles)
    ANSWER 30 OF 35 CAPLUS COPYRIGHT 2003 ACS
L2
Full Text
AN
    1974:575164 CAPLUS
DN
    81:175164
ΤI
    Refractory insulator
    Blandin, Henri M. F. F.; Blandin, Michel M. R. A.; Blandin, Philippe P. P.
IN
so
     Fr., 5 pp.
    CODEN: FRXXAK
DT
    Patent
    French
LA
IC
    C04B
CC
    57-5 (Ceramics)
FAN.CNT 1
                     KIND DATE
                                          APPLICATION NO. DATE
     PATENT NO.
                           _____
                                          _____
     ______
     FR 2192552
PΙ
                      A5
                           19740208
                                          FR 1972-24878
                                                           19720710
                           19720710
PRAI FR 1972-24878
    Refractory insulation is prepd. from a dry mixt. contg. mineral fibers
     with a high thermal resistance such as rock wool, slag wool or silica
     wool, to which are added natural asbestos fibers which impart flexibility
     and plasticity which aids in smoothing the product after application and
     improves the final appearance. To these mineral fibers is added a slow
     setting binder such as hydrated magnesia or Sorel cement or CaSO4. Such
     a mixt. can have the following compn.: mineral wool 20, asbestos fibers
     15, MgO 16, and CaSO4 8 kg. This mixt. is then mixed on a gantry with
     water with the addn. of a fast setting org. binder such as vinyl
     acetate, or a urea-formaldehyde resin, along with a suitable hardener.
     The above dry mixt. is softened with 45 l. H2O and 15 l. H2O contq. 1.5 l.
     urea-formaldehyde resin and 100 cm3 of hardener. Into this paste is added
     a foam obtained by passing 5 l. of the mixt., 15 l. H2O, resin and
     hardener, and 0.5 l. Li laurylsulfate as foaming agent, through a foam
     gun, from which is formed a large no. of air bubbles, a 1-3 increase in
     vol. of the paste. To this paste is added, if necessary, a moisture
     stabilizer such as C silicate.
     asbestos refractory insulator; rock wool refractory insulator; silica wool
ST
     refractory insulator; binder refractory insulator
     Thermal insulators
IT
        (asbestos-mineral wool)
IT
     Foaming agents
        (lithium laurylsulfate, for asbestos-mineral wool thermal insulators)
IT
    Mineral wool
```

```
(thermal insulators, contg. asbestos)
TΤ
     Asbestos
     RL: USES (Uses)
        (thermal insulators, contg. mineral wool)
     1309-48-4, uses and miscellaneous 7778-18-9
TΤ
     RL: USES (Uses)
        (binders, for asbestos-mineral wool thermal insulators)
ΙT
     2044-56-6
     RL: USES (Uses)
        (foaming agents, for asbestos-mineral wool thermal insulators)
     ANSWER 31 OF 35 CAPLUS COPYRIGHT 2003 ACS
1.2
Full Text
     1974:60706 CAPLUS
AN
DN
     80:60706
    Porous structures with filtering and sorbing action
ΤI
IN
    Fritsche, Bernd; Hoentzschel, Horst
     Ger. (East), 2 pp.
SO
     CODEN: GEXXA8
DT
    Patent
     German
LA
IC
     B01D
     37-3 (Plastics Fabrication and Uses)
FAN.CNT 1
                                        APPLICATION NO. DATE
     PATENT NO.
                    KIND DATE
     ______
                                          _____
                          19721005
                                        DD 1971-159004 19711118
PΙ
     DD 92903
     Porous solids useful as filters and sorbents for nonaq. liqs. or gases,
     esp. Freons in refrigeration systems, were manufd. by adding inorg.
     sorbents to liq. polyurethane systems which formed rigid foams and
     contained only small amts of blowing agent, molding, and curing. Thus, 50
     g inactive silica gel was mixed with 5 g polyurethane from polyether
     polyol 45.1, raw 4,4'-diphenylmethane diisocyanate 54.6,
     siloxane-polyether copolymer foam stabilizer 0.2, and water 0.1% in
     4 ml acetone, poured in a mold, and hardened at room temp. The silica gel
     was activated by heating 6 hr in air at 140.deg., and had water
     absorption nearly equal to that of silica gel without binder, and was
     completely regenerable.
     polyurethane silica foam filter; Freon refrigerant filter; sorbent
ST
     polyurethane silica foam
IT
    Filtering materials
        (aluminum oxide and silica gel, cellular urethane polymer
       binders for)
IT
    Urethane polymers, uses and miscellaneous
     RL: USES (Uses)
        (binders, for inorg. sorbents, for filtering material manuf.)
     Silica gel, uses and miscellaneous
IT
     RL: USES (Uses)
        (sorbents, urethane polymer binders for, in filtering
       material manuf.)
     1344-28-1, uses and miscellaneous
     RL: USES (Uses)
        (sorbents, urethane polymer binders for, in filtering
       material manuf.)
    ANSWER 32 OF 35 CAPLUS COPYRIGHT 2003 ACS
L2
Full Text
     1970:22315 CAPLUS
AN
    72:22315
DN
TI Flexible plastic sheets
PA Dunlop Co. Ltd.
SO Fr. Addn., 9 pp. Addn. to Fr. 1518134
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CODEN: FAXXA3

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DT
     Patent
LΑ
    French
IC
    D06N; B32B; C09J
CC
    36 (Plastics Manufacture and Processing)
FAN.CNT 1
     PATENT NO.
                    KIND DATE
                                          APPLICATION NO. DATE
     ______
                                          -----
PΙ
     FR 93925
                           19690606
PRAI GB
                           19670111
     GB
                           19670321
    Flexible plastic sheets, useful for prepg. artificial leather, were prepd.
AΒ
     from polyurethane foam and a fibrous material. Thus, 2 crosslinked
     polyester polyurethane foam sheets of 8 mm thickness were placed on the
     2 surfaces of a nylon fiber sheet (200 denier) and the composite
     compressed 2 min at 165° and >7 kg/cm2 to give a flexible sheet
     permeable to air and water vapor, but not to water, and having tensile
     strength 8.16 kg/2.54 cm, elongation 300%, and tear resistance 68 kg/2.54
     cm. Two pieces of polyurethane foam were assembled on the 2 sides of a
     viscose filament sheet, the composite compressed 30 min at 180° and
     32 kg/cm2, a latex mixt. (prepd. from styrene-butadiene copolymer 100, 50%
     aq. S dispersion 2, 15% aq. K oleate soln. 0.5, 50% aq. Wingstay S
     dispersion 2, 50% aq. mercaptobenzothiazole 0.4, 50% aq. Zn
     diethyldithiocarbamate 0.8, NH4OH 0.4, 50% aq. ZnO dispersion 3, and 20%
     aq. NH4Cl soln. 3 parts) used for impregnating the composite, the
     composite gelled in a steam oven, vulcanized 20 min at 100° with
     steam, dried with hot air. The composite was finished by spraying with a
     mixt. of polyacrylate latex (Primal HA4) 1, butadiene-Me methacrylate
     copolymer latex (Butakon M \scriptstyle\rm L 59) 1, aq. carbon black dispersion 2, and
     water 2 parts, and embossed 45 sec at 110° and 2.7 kg/cm2 to give
     a product similar to leather and having water vapor permeability 1.1
     mg/cm2/hr. Other fibrous sheets used were prepd. from poly(ethylene
     terephthalate), acrylic fibers, viscose fibers contg. poly(vinyl acetate)
    binder, and rayon-nylon-cotton mixed fabric. The polyurethane foam
     may be impregnated with a light stabilizer compn. before assembling with
     the fibrous component.
    leather artificial; polyurethane foams fabric laminates; foams
    polyurethane fabric laminates; fabric laminates polyurethane foams
    Leather substitutes
        (from urethane polymer-impregnated fibrous sheets)
    Urethane polymers, uses and miscellaneous
    RL: USES (Uses)
        (leather substitutes from synthetic fibers impregnated with)
    Fiber, acrylic, uses and miscellaneous
     Fiber, polyester, uses and miscellaneous
    Nylon, uses and miscellaneous
    Rayon, uses and miscellaneous
    RL: USES (Uses)
        (leather substitutes from urethane polymers and)
    ANSWER 33 OF 35 CAPLUS COPYRIGHT 2003 ACS
L_2
Full Text
    1969:422854 CAPLUS
AN
DN
    71:22854
    Strengthening of textile sheets with foam adhesives
ΤI
    Schroeder, Guenter; Ploch, Siegfried; Moeschler, Wolfgang; Reif, Karl A.;
    Scharch, Dieter
SO
    Ger. (East), 3 pp.
    CODEN: GEXXA8
DT
    Patent
LA
    German
IC
    D06M
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CC
   39 (Textiles)
FAN.CNT 1
                                          APPLICATION NO. DATE
    PATENT NO.
                     KIND DATE
     ________
                                          DD
PI
    DD 64686
                           19681120
                                                           19680226
    Textile sheets, such as napped fleeces and woven goods, are strengthened
     and stabilized with binders in the form of stabilized, fine-pored,
     flowable foam compns. The compns. contain cellulose ethers, ether
     carboxylic acids, or ether carboxylates as foam stabilizers and
     adhesion improvers, in combination with nonionic or anionic foam formers
     and other additives. A combination of a polyacrylonitrile fiber fleece on
     a viscose fabric base was impregnated with a foamed mixt. of 40%
     polyacrylate 40, aminoplast resin 5, 5% ammonium salt 5, alkyl
     sulfate-ethylene oxide adduct 2, CM-cellulose 8, and water 40 parts by
    padding the foam mixt. onto both sides of the fabric. The foam was
    pressed in on the fleece side so that none remained on the surface. A
     further coating was then applied to the fleece if desired. The binder
     content in the sheet was 18%. Fleeces from polyamide and polyester fiber
     and foamed compns. contg. reactive butadiene-acrylonitrile (I) latex and
     reactive I-acrylate copolymers were also used. This process improves the
     strength of the fabrics without decreasing their permeability.
ST
    textiles foam impregnation; foam impregnation textiles
TΤ
    Aminoplasts
    RL: USES (Uses)
        (acrylate polymer adhesives contg., strengthening of textiles by
        foamed)
IT
    Adhesives, uses and miscellaneous
        (acrylic polymers, strengthening of textiles by foamed)
IT
    Acids, uses and miscellaneous
    RL: USES (Uses)
        (ether carboxylic, acrylate adhesives stabilized by, strengthening of
       textiles by)
IT
    Foaming agents
        (ethers, acrylic adhesives contg., strengthening of textiles by)
    Fiber, polyester, uses and miscellaneous
IT
     RL: USES (Uses)
        (nonwoven fabrics from nylon and, strengthening by acrylate
       polymer-aminoplast foamed adhesives)
     Fiber, acrylic, uses and miscellaneous
IT
     RL: USES (Uses)
        (strengthening of textile fleece contg., by foamed adhesives)
IT
    Rayon, uses and miscellaneous
    RL: USES (Uses)
        (strengthening of, by foamed adhesives)
IT
    Textiles
        (strengthening of, with foamed acrylic ester adhesives)
IT
     9000-11-7
        (acrylate foamed adhesives stabilized by, strengthening of textiles by)
IT
    9003-01-4
    RL: USES (Uses)
        (adhesives from, strengthening of textiles by foamed)
    ANSWER 34 OF 35 CAPLUS COPYRIGHT 2003 ACS
L2
Full Text
    1967:76617 CAPLUS
AN
    66:76617
DN
    Lamination of a moldable sheet and foam material without binder
TI
    Atkins, Harold J.; Davis, Roy
IN
    Lantor Ltd.; Imperial Chemical Industries Ltd.
PA
SO
    Brit., 4 pp.
    CODEN: BRXXAA
```

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DT
    Patent
LA
    English
IC
    B32B
    37 (Plastics Fabrication and Uses)
FAN.CNT 1
                                          APPLICATION NO. DATE
     PATENT NO.
                     KIND DATE
     -----
                                          _____
                                          GB
ΡI
     GB 1052032
                           19661230
                                                           19611122
    A method is described for bonding a {\bf foam} material to a heat- and
AΒ
     pressure-moldable sheet material. Thus, a poly(vinyl chloride) (PVC) film
     was prepd. from PVC 100, dialkyl phthalate 45, pigment 20, and a
     stabilizer 2 parts and calendered to a 0.008-in. thick sheet. A web
     (1.5 oz./yd.2 of Dynel fibers was bonded with Geon to form a nonwoven
     fabric (2 oz./yd.2) and laminated with the film by passing through a pair
     of nip rolls, heated to 100-5°, at 300 psi. by a match die moldings
     method to result in no bursting at the corners. The laminate was molded
     into a car seat cushion, and a mixt. of a polyurethane prepolymer 100,
     cyclohexyldimethylamine 0.9, silicone fluid 1, a lubricant 0.7, and
     water 2.12 parts was poured into the inside of the cushion and allowed
     to foam to give a cushion having good bonding between the foam and the
     laminate. Similarly an acrylonitrilebutadiene-styrene copolymer was
     laminated with a Dynel fabric bonded with Hycar.
    FOAM SHEETS LAMINATED MOLDABLE; LAMINATED MOLDABLE FOAM SHEETS;
    MOLDABLE LAMINATED FOAM SHEETS; SHEETS LAMINATED MOLDABLE FOAM; DYNEL
    MOLDABLE FOAM SHEETS; PVC MOLDABLE FOAM SHEETS; HYCAR MOLDABLE FOAM
    SHEETS; POLYURETHANE MOLDABLE FOAM SHEETS
TТ
    Urethane polymers, preparation
     RL: TEM (Technical or engineered material use); USES (Uses)
        (cellular, prepn. and bonding of, in situ in laminate of moldable sheet
        polymer with acrylic fiber mats for automotive seat cushions)
ΙT
    Automobiles
        (cushions for, from urethane polymer foam bonded to moldable
        plastic sheet laminate with acrylic fiber mats)
TΤ
     Porous materials, preparation
        (in molded sheet plastic laminate with synthetic fiber mats, for
        automotive seat cushions)
ΙT
     Fiber, acrylic, uses and miscellaneous
    RL: USES (Uses)
        (lamination with acrylonitrile-1,3-butadiene-styrene copolymer or vinyl
        chloride polymers, and in situ formation and bonding of urethane
        polymer foams therein, for automotive seat cushions)
    Lamination of plastics
IT
        (of acrylonitrile-1,3-butadiene-styrene copolymer or vinyl chloride
        polymer with acrylic fiber web by heat and pressure, and in situ
        formation and bonding of urethane polymer foams therein for
        automotive seat cushions)
                                         9003-56-9P, uses and miscellaneous
    9002-86-2P, uses and miscellaneous
     RL: PREP (Preparation); USES (Uses)
        (lamination with acrylic fiber mats by heat and pressure, and in situ
        formation and bonding of urethane polymer foams therein, for
        automotive seat cushions)
    ANSWER 35 OF 35 CAPLUS COPYRIGHT 2003 ACS
L2
Full Text
    1966:448507 CAPLUS
AN
    65:48507
DN
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OREF 65:9118h,9119a-c

8 pp.

Patent

IN

PA SO

DT

TI Molding plastic articles

Ericson, Lloyd J. Sheller Manufg. Corp.

LA Unavailable

NCL 264045000

CC 48 (Plastics Technology)

FAN.CNT 1

A process for forming high-viscosity, vinyl polymer plastisol films with uniform gage and having no internal voids is described. The films produced are useful in automobile interiors. The films are prepd. by airless spraying of vinyl plastisols on a contoured, preheated mold surface and then either a stripping or bonding the film to a core. Thus, a plastisol of poly(vinyl chloride) (I) 80, I-vinylidene chloride copolymer resin 20, polyester plasticizers (Paraplex 9-54)10, epoxy plasticizer (Monoplex S-74) 30, phthalate plasticizer (Flexol 10-10) 25, and stabilizers (Ba-Cd-Zn powder and liquid types) 2.5 parts was prepd. by mixing the plasticizers and stabilizers in a dough mixer and adding the polymer resins over 10 min. After 30 min. mixing, an aliquot was removed and blended with a TiO2 pigment (HSC 930 White) which was dispersed in a plasticizer (Paraplex G-62) (II) at a ratio of 70:30 TiO2: II. A 6% mixt. of the dispersion in plastisol was formed and mixed to produce a liquid with 9000 cp. viscosity at 82°F and 2 rpm. on a Brookfield viscometer. A Cu-Ni automobile crash pad mold was heated to 280°F and sprayed with the product from an airless spray gun at  $120\,^{\circ}F./1800$  psi. The mold and film were heated to  $400\,^{\circ}F.$  30 min. and cooled in water to 150°, a mold plate was placed over the mold, a urethan foam was poured in, and the mold was heated to 150° 20 min. Upon removal of the mold, a uniform polymer cover sheet was firmly bonded to the foam.

IT Epoxy resins

(as binders, for ground refractories for molds)

IT Urethane polymers

(cellular, covered by vinyl chloride polymer plastisol films, molding of)

IT Molding

(of urethan polymer **foam** composites with vinyl chloride polymer films from plastisols)

IT 9002-86-2, Ethylene, chloro-, homopolymer (plastisols of, molding urethan polymer foams covered by films from)

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